DOCUMENT RESUME

ED 204 525	CE 029 417

AUTHOR	Ogren, Evelyn H.; Lauricella, John
TITLE	Sheltered Workshops Employee Satisfaction Survey. Part Two: Technical Report.
INSTITUTION	Yooralla Society of Victoria (Australia). Dept. of Research and Development.
REPORT NO	ISBN-0-9594413-3-6
PUB DATE	Apr 81
NOTE	94p.; The appendix will not reproduce well due to small print.
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Adults; *Disabilities; *Employee Attitudes; Employer Employee Relationship; Evaluation Methods; *Interviews; Literature Reviews; Mental Retardation; *Participant Satisfaction; Physical Disabilities; Program Effectiveness; Questioning Techniques; *Research Methodology; *Sheltered Workshops; Surveys
IDENTIFIERS	Australia (Victoria)

ABSTRACT

The special employment program in Yooralla Society of Victoria (Australia) began operation two decades ago with establishment of sheltered workshops. As part of an overall review of Yooralla's programs, a survey was conducted as a first stage in evaluation of the workshops--Ability Industries and Ability Press. The aim of the research project was to obtain perceptions of the disabled employees at the two workshops about their work tasks, working environment, and job satisfaction. Almost all of these employees have a physical disability; many have an intellectual disability. The first section of this report presents the conceptual framework for the workshops' employee satisfaction survey as derived from an extensive review of the literature. Employment problems of disabled persons are discussed and an overview of job satisfaction is presented. The second section details the research process, particularly interaction with the target group. The survey is classified as "utilization-based evaluation," a form of action research which places special demands upon those who are responsible for obtaining data and providing information. The Victorian Society for Crippled Children and Adults' Department of Research and Development served as an in-house evaluator for the agency and outside evaluator for the target program. (KC)

****
* Reproductions supplied by EDRS are the best that can be made
* from the original document.
****

ED204525

SHELTERED WORKSHOPS EMPLOYEE
SATISFACTION SURVEY

PART TWO: TECHNICAL REPORT

Evelyn H. Ogren
and
John Lauricella

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Evelyn H. Ogren

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

YOORALLA SOCIETY OF VICTORIA
Department of Research and Development
APRIL 1981

CE 029 417

National Library of Australia card number and ISBN

ISBN for the series (Parts I and II) 0 9594413 1
ISBN for this volume 0 9594413 3 6

YOORALLA SOCIETY OF VICTORIA

Department of Research and Development
P.O. Box 88
South Melbourne VIC 3205

CONTENTS

Foreward i

Conceptual Framework 1
  Employment Problems of Disabled Persons 1
  Definition of Job Satisfaction 5
  Factor Relationships 16
  Pay 19
  Environment and Working Conditions 23
    The sheltered workshop environment
  Opportunity 27
  Type of Work 32
    Work in special employment
  Status 36
  Co-Worker Relationships 39
    Workshop co-worker relationships
  Supervisory Relationships 43
    Workshop supervisory relationships
  Management (Structure) 46
    Individual need
    Employee participation
    Workshop employee participation
  Models for Analysis 53

Methodology 57
  Clearance for the Survey 57
  Confidentiality 61
  Data Collection Issues 62
  Interviewers 64
  Sample Selection and Interviewer Assignment 66
  Data Management 69
  About the Analysis 72
  Methodological Issues 72
    Question wording
    Interview schedule
    Project assessment

References 79

Appendix: Interview Schedule 85

TABLES AND CHARTS

Chart 1. Conceptual Framework 17

Chart 2. Extrinsic and Intrinsic Indicators 54

Chart 3. Analytic Model 55

Table 1. Survey Participants and Non-Participants 69

Table 2. Population and Sample from Each Workshop 70

FOREWARD

The special employment program in Yooralla Society of Victoria began operation two decades ago with establishment at South Melbourne of the Production Division of the Victorian Society for Crippled Children and Adults. The program now includes two sheltered workshops in Metropolitan Melbourne and two workshops in country areas. As part of an overall review of Yooralla's programs, a survey was conducted as a first stage in evaluation of the Metropolitan workshops - Ability Industries and Ability Press.

The aim of the research project was to obtain perceptions of the disabled employees at the two workshops about their work tasks, working environment, and job satisfaction. Almost all of these employees have a physical disability; many have an intellectual disability. Findings from the employee interviews are reported in a separate volume. This volume expands two aspects of the survey conducted among disabled employees. It should be of especial interest to several groups:

- Agencies which have similar concerns about their accountability to those persons who are dependent upon an organisation for special employment consideration; and
- Researchers who are involved in providing evaluative information.

The first section of Part II presents the conceptual framework for the workshops employee satisfaction survey as derived from an extensive review of the literature. The discussion on Employment Problems of Disabled Persons and the overview of Job Satisfaction are repeated from the first volume.

The second section details the research process, particularly interaction with the target group. The survey is classified as 'utilization-based evaluation', a form of action research which places special demands upon those who are responsible for obtaining data and providing information. The Society's Department of Research and Development served as an in-house evaluator for the agency and outside evaluator for the target program.

We hope the report of our experiences will be of value to other disabled sheltered workshop employees.

EVELYN H. OGREN, D.S.W.
Director
Department of Research and Development.

CONCEPTUAL FRAMEWORK

> 'Work is an essential part of a man's life since it is that aspect of his life which gives him status and binds him to society' (Brown 1954, p. 187).

The right of disabled persons to satisfying work was the underlying premise of this attitudinal survey. A review of literature on 'job satisfaction' and those factors which contribute to its achievement found little research directed toward this worker group. Project staff assumed that the same factors of employee satisfaction in any work/industry would apply to sheltered workshops but that differences might occur in the weighting or contribution of the various factors. Organisational theory was therefore adapted to the special employment situation as shown in the questions asked the sheltered workshop employees. The following paragraphs help to put the research questions in context.

Employment Problems of Disabled Persons

Many sheltered workshop employees are individuals whose physical or mental condition(s) preclude competitive work. This can be due to employer attitudes toward disability generally or toward a more specific form of less than normal functioning (Ogren 1978, p. 22); to the extent of the individual's capability or desire to assume normal social responsibilities; or to a mixture of factors deriving from both potential employer and employee.

The Department of Social Security Annual Report noted that at the end of June 1980, 7600 persons were employed in 160 DSS-approved sheltered workshops.* Over 1500 Victorians were in 30 approved workshops, half of which were multi-diagnostic and another fifth having only physically disabled employees (spastic). Most of these facilities provide work for persons who appear to be unemployable, that is, who cannot be placed in competitive employment* (Limbrick 1977, p. 14). A few transitional facilities are used for evaluation, work therapy, etc. under a habilitative or rehabilitative goal designed to prepare clients for placement in competitive employment, and some comprehensive workshops combine the functions of long-term employment and work preparation.

---

*Workshops approved for subsidy and Sheltered Employment Allowances under the Handicapped Persons Assistance Act of 1974.

The terminal nature of employment in a sheltered workshop is shown in the small number of employees who 'move out' and leave for open employment. The 1976 DSS Survey of Sheltered Employment found that there was an (annual) retention rate of nearly 75 per cent. While 16 per cent (325 persons) claimed to leave for open employment, DSS paid a $500 training fee to workshops in respect of only 54 handicapped persons successfully placed. Only six of those placements were in Victoria although this State contains almost 30 per cent of the Australian workforce. The reason is 'no doubt related to the comparatively small number of workshops in Victoria' (Limbrick 1977, p. 14). While the numbers of sheltered workshop employees has increased each year since, DSS payments of the training fee have decreased, being made in respect of only 26 former workshop employees in 1979-80, none in Victoria.

The experience of workshops operated by Yooralla Society of Victoria is not unusual wherein fewer employees leave the workshops each year to go to regular jobs. This reflects change in the abilities of disabled persons who enter special employment, and change in job opportunity:

Initially, these workshops served more of a rehabilitative-training function. Applications were accepted from persons with potential for other work but who were not eligible for Government rehabilitation progams. As these programs expanded along with the Commonwealth Employment Service, they became the more appropriate first resource for many persons who otherwise would have gone directly into special employment. Now, the sheltered workshops are more likely to meet the needs of disabled persons who have completed a Government-sponsored course in rehabilitation but who are still considered unfit for work under normal conditions, or who are assumed to be unlikely to profit from or not be eligible for a course in rehabilitation.

---

*Interchangeable terms are open employment and, from the standpoint of the workshops, outside employment.

Also, under former periods of good economy, workshop training in combination with agency efforts enabled less severely disabled workers to obtain regular employment. As numbers of the unemployed in the community increased, and as mechanization increased in business and industry, disabled persons have found decreasing opportunities for work they are capable of doing. Successful placement outside continues to be possible if staff is available to work with employers and provide supportive follow-up with the disabled employees. Unfortunately, neither the agency nor the Commonwealth Employment Service has sufficient resources to do this work to the extent needed.

The workshops population now has little turnover. In the year ending 30th June 1980, 30 of the 188 employees left Yooralla's two metropolitan workshops, only 12 reported to be looking for or working in open employment. Some of these will not succeed and will return to special employment.

If employers are willing, functional limitations can be offset to varying degrees in the open work setting by adaptation of machinery and equipment, and by allowance for individual differences (e.g. speed, tolerance, endurance). Many disabled persons do find work this way. Lack of development or skill, or loss of particular abilities may be ameliorated through special training or rehabilitation. Motivational and other psychological barriers can be addressed through professional counselling and other means of enhancing the individual's desire to assume a normal role in society.

Many disabled persons do not attempt competitive employment and opt, instead, for a job in a sheltered workshop as an alternative to 'staying home and doing nothing' and possibly being maintained on the Invalid Pension. Reasons for this choice are economic and psychological:

1. The great majority of workshop employees receive the Sheltered Employment Allowance, the equivalent rate of the Invalid Pension; an additional payment by the workshop is often in the form of a productivity allowance. Since further earnings are subject to a means test and may result in a corresponding reduction in the SEA, there is a disincentive to attend work regularly or to be productive ('Bright Report' 1978, p. 150).

'Taking into account increased expenses and reduced benefits, it is obvious that some invalid pensioners are out of pocket as a result of attending sheltered workshops, the majority make a small net gain, and a small minority get a reasonable return for effort' (Treloar 1977, p. 49).

2. Transport, travel and other concessions are provided at some facilities.

3. Open employment places pressures and difficulties that are reduced in the sheltered setting (lesser expectations of production, slower pace of work, accessible environment, etc.).

4. Work experience limited to the sheltered setting can result in poorly developed perceptions of work and its relationship to normal everyday life, in reduced decision-making and social abilities, in increased reliance on others - all mitigating against development of independence and open community living.

The same reasons for the workshop choice apply to disabled persons without any work experience even though they may have 'assessed potential' for open employment, as well as to persons in the competitive labor market who find that they can no longer cope with the work.

The main differences between sheltered workshops and open employment are in payment of an allowance less than the minimum wage ('welfare'), and special services or provisions that allow the disabled employees to perform normative work. Long-term employment within the workshop could achieve vocational objectives for any member of society 'if clients performed jobs that were comparable to those in the competitive sector and paid competitive wages' (Pomerantz and Marholin 1980, p. 263). This type of employment also 'does not provide an excuse for stagnation' (Limbrick 1977, p. 18) if the right type of work is available and the disabled employees are considered equal members of the labor force and accorded similar rights. The function of workshops as businesses or training centres is not reduced if these are operated in keeping with the best principles of management for each (recurring theme at the National Conference 1977).

An observer from the international scene (Brolin 1980) noted last year:

> 'Employment opportunities and job maintenance of severely disabled persons in Australia is focused primarily on sheltered employment as a major goal. Naturally there are certain exceptions. . . But, as a system, the effort presently is being directed to providing government benefits in terms of social security invalid pensions and sheltered employment allowances for the more severely handicapped' (p. 7).

His final impression (pp.39-40) recognized efforts to make changes with habilitation and rehabilitation services which are now in a state of flux, with accentuated growth apparent following the momentum of the decade of the seventies. He noted two important deterrents to delivery of services as they are needed now by the more severely handicapped individual. One is the lack of sufficient funds to hire professional personnel to implement additional services; the second, the uncertainties connected with government funding and priorities.

Another significant problem noted by this observer is the ease with which the disabled person can receive an invalid pension or sheltered workshop allowance, even at age 16, and then be on social security for a lifetime. Many parents and disabled persons were seen as willing to accept this security rather than seriously question if there might be a better alternative, on the way losing motivation and incentive to change from a dependent status. Some facility personnel seemed to foster this dependence on a false security. The normalization principle was seen as expounded in Australia but not really being implemented in practice with its severely disabled population.

This review is not intended to address the issue of wage versus welfare (Vash 1977) or a philosophy of 'occupational identification at any cost'. It does postulate that for disabled persons who choose to follow special employment opportunities, the concept of 'job satisfaction' as discussed below applies equally with fair payment for one's work.

Definition of Job Satisfaction

> 'The easiest way to find out how much a person enjoys his work is to ask him' (Argyle 1972, p. 223).

Interest in an employee's or worker's satisfaction with his job is not new (Blauner 1960; Locke 1976). Most of the research findings indicate that job or employee satisfaction is affected or even determined by one or more factors which can vary depending upon personal characteristics, work-related aspects (type of occupation, status ascribed to the job, etc.) or non-work related aspects (e.g. general life satisfaction). The fact that an individual will continue to work in a job which he does not find generally satisfying indicates that there must be other important considerations.

Work is one of the central activities of life in terms of the relative time it occupies but it is not necessarily a central life interest. For some workers, particularly those alienated from their work, the job is not an important part of their personalities or lives (Argyle 1972, p. 3). Also, the importance of the job in satisfying individual needs depends upon the degree to which those needs are met outside the work milieu. Where, for example, meaningful social contact is not experienced outside of work, the need for belongingness (Maslow 1970, p. 43) could be met through identification with the work group, heightening job satisfaction.

While an individual may find a number of positive incentives to work (pay, job status, interesting tasks, etc.), negative incentives also exist (Brown 1954, p. 187). Some of these are the fear of being unemployed and the stigma involved, the difficulties of obtaining another job, the lack of a regular income, and the inability to otherwise occupy one's time constructively. The fact that the worker has a job while others in his social milieu do not may be sufficient cause for individuals to generally feel satisfied with their work. This satisfaction or 'fatalistic contentment' (Robinson, Athanasiou & Head 1969, p. 66) is related not so much to the conditions and content of the work itself as to perceptions of job availability and social respectability attached to working.

Information on a person's job satisfaction has been asked for in many ways - from a single question to multiple items comprising complex scales which cover different aspects of the job. The classification of these aspects is arbitrary and the elements/components/factors have been broken down in an infinite number of ways. Once past the simple question of 'overall job satisfaction', most studies have considered something or some things intrinsic to the respondent (related to ego satisfaction) and

and something(s) extrinsic, related to his job. A few studies are reviewed in the following paragraphs to show alternative definitions of 'job satisfaction'.

In a study carried out for the Minister of Labor and Immigration, some two thousand members of the Australian urban work force were asked about their work, the concern being the quality of their work life (Emery and Phillips 1976). The analysis, starting with respondents' overall feelings about their present job (ranging from 'I love it' to being enthusiastic about it, or liking it, down to hating it), considered the following contributors to job satisfaction (in addition to the usual demographic descriptors):

'Taylorism supervision' (or the bureaucratization of work)
Quality of work
Social climate
Attempted mobility
Satisfaction with life
Conditions, pay, etc.
Subjective quality of work:
  Sense of achievement
  Interest
  Satisfying variety
  Concern with quality
  Kept very busy

Interest in the job and sense of achievement were the two aspects of jobs that correlated highest with job satisfaction. The researchers concluded that any statement of job satisfaction is reaction to either related aspect.

A Department of Social Security-funded survey in Adelaide (O'Brien and Dowling 1980) investigated the association of congruence of desired and perceived job attributes with job satisfaction, using an 0.5 per cent household sample. The lengthy interviews conducted in 1975 included a large number of items in each of three main variable areas, each item being measured on a five-point scale.

Perceived job attributes (formal and informal) were described as follows:

Skill utilization, distinguished from skill level or variety, covered items of 'opportunities for': learning new jobs working in the way the respondent thought best; using his abilities; using training experience.
(Response categories: not at all, very little, some, a reasonable amount, a great deal.)

Influence included more items than other attributes as it was considered that there was a large number of job aspects which a worker could potentially influence: The amount of say or influence workers had over who they chatted with; design of the work place; speed of work; new skills learned; choice of supervisor; choice of co-workers; organization of work; rest periods; overtime; the jobs done.
(Response categories: none, very little, some, a great deal, a very great deal.)

Variety items asked about: Amount of job changes; change in location; variation of work pace; frequence of interaction with different people.
(Response categories: not at all, a little, a fair amount, quite a lot, a very large amount.)

Pressure items asked about the extent to which the respondents felt they: Were rushed by other people; received feedback on work quality; worked to deadlines; had time to correct mistakes.
(Response categories: all the time, quite a lot, a fair amount, occasionally, never.)

Social interaction items asked how much respondents: Had to work together with others; had opportunities to chat; were required to talk to others as part of the job; did work which was dependent upon the previous work of others.
(Response categories: Same as for Pressure above.)

The desired attribute or work value scales were similar to those used to measure perceived job attributes but asked the respondents instead to describe how they would like their jobs to be. (Response categories: none, very little, some, a great deal, a very great deal.)

The job satisfaction scale contained 18 items covering different facets of the job (with response categories: very dissatisfied, dissatisfied, neither satisfied nor dissatisfied, satisfied, very satisfied): Supervision; pay; co-workers; variety; skill level; opportunities for learning and for growth; influence; pressure; feedback; promotion; physical conditions; challenge. The items were designed to include the intrinsic attributes of the job together with extrinsic or job context attributes. The researchers noted that it was decided to develop a new measure of job satisfaction rather than use a standard measure (such as the Job Description Index) to sample a wider range of job facets. Correlations between the new facet scale and the JDI were sufficiently high to interpret the new scale as a work satisfaction scale.

A study of job satisfaction among 'average workers' in rehabilitation settings in the Edmonton Region of Alberta, Canada, used a scale consisting of seven 'job factors' considered to be major components of any job (MacDonald, Kinkaide & Braizer 1979). Each factor contained four statements in the form: 'I am ... with _____'. Respondents rated each statement according to a seven-point rating system ranging from 'extremely dissatisfied' (1) through 'neutral' (4) to 'extremely satisfied' (7). A 29th item asked for an overall level of satisfaction ('In summary, I am ... with my job'). The job factors and the statement ideas were:

A. General job characteristics:
  - Freedom in performance of job
  - Quality of own job performance
  - Emotional involvement called for by work
  - Sense of accomplishment given by job

B. Specific job characteristics:
  - Things I have to do in my job
  - Current job hours
  - Fellow staff members
  - Day to day routine

C. Supervision:
  - Way supervisor and I communicate
  - Opportunities to make ideas and opinions known to supervisor
  - Amount of direct job guidance provided
  - Amount of information received about program policies, objectives, job development opportunities, etc.

D. Administration:
  - Way management and I communicate
  - Opportunities to make my ideas and opinions known to management
  - Chance to participate in and contribute to decisions made concerning this agency
  - Amount of information received about agency policies, agency objectives, organizational revisions, and the role this agency is serving within the department

E. Orientation training:
  - Introduction received to present job assignment
  - Quality of theoretical training received during orientation to job
  - Quality of practical training received during orientation to job
  - Amount of assistance received when learning something new during orientation to job

F. Ongoing training:
  - Instruction and guidance available when given a new task
  - Training material available to help me perform my job more effectively
  - Ongoing training opportunities (seminars, conferences, courses etc.) available where I work
  - My degree of participation in these training opportunities

G. Support resources:

- Physical environment worked in (e.g., space, cleanliness, cheerfulness)
- Equipment/supplies available to assist me in performance of my job
- Support staff available to me (e.g., consultants, aides, clerical support)
- Conveniences available for staff (e.g., staff lounge, lunchroom)

An extensive study of 26 Day Work Centres for spastics in England, Wales and Northern Ireland was conducted to help determine the future course of the Centres - 'should they be primarily places of work, or should they provide the diversionary, educational and social activities normally available to those of a similar degree of handicap and considered capable of only a modicum of effort and industry?' (Schlesinger and Whelan 1979, pp 2-3). Data was obtained from a 10 per cent sample of workers. Subjects discussed in interviews with these 84 workers included the worker's disability, independence in daily activities, home life and leisure, education, work attainment and attitudes, and aspirations both in and outside work.

The general attitude of workers to the Centres was addressed as enjoyment or not with attendance, with a midpoint represented as 'quite like attending' (p. 8). Other question areas relating to work included: work preference, attitude toward responsibility in the Centre, need/desire for training, greatest incentive, desire for information on production, individual ability for (more) production, suggestions for improvements, and changes they would like to see in the Centre (e.g. type of work, more interesting work, more challenge, more variety).

Workers' opinions were compared with reports from the Centre Managers as to the characteristics of each group of workers, and with group data on Work Skills (rated by supervisors).

Two major studies of sheltered workshops have been sponsored by the United States Government. In 1974, the Department of Health, Education, and Welfare contracted with a private consulting firm to conduct a Congressionally mandated evaluation of certain aspects of sheltered workshops (The Role 1975). A total of 2,140 clients from the sampled workshops* were interviewed in order to obtain views from clients with all forms of disability. Clients were asked whether they had been generally satisfied with their experiences in the workshops, under three response categories: Quite satisfied, fairly satisfied, not satisfied - in addition to the usual 'no opinion'. Other satisfaction questions related to client perceptions of the receipt and quality of evaluation services in the workshops, the degree of helpfulness of various training and rehabilitation services provided by the workshops or through referral, and training for unsheltered employment (expectations of placement in the near future, and 'feeling ready' for such placement).

Using field staff from the Bureau of the Census, the Department of Labor's Employment Standards Administration obtained data in 1976 from a random sample of clients from the universe of all known sheltered workshops stratified by size and type of program - regular program, work activity centres, training and/or evaluation program (Sheltered Workshop Study, Vol. II 1979). Clients (or their alternates for clients not capable of a meaningful response) were asked a number of questions to evaluate the effect of their workshop experience. The items were as follows, with a 'no opinion' response allowed for in each (pp. 42-48).

- Workshop experience will help clients to obtain work outside the workshop (Yes/No)
- Workshop experience has improved client's confidence to work outside the workshop (Yes/No)
- Client feels ready for employment outside the workshop (Yes/No)
- Degree of improvement in the ability of the client to get along with other people since starting work at the workshop (i.e., social adjustment change). (Substantial improvement/ Modest improvement/ No change/ Worsened)
- Workshop treatment of client (Very fair/ Fair/ Not very fair)

Job satisfaction was evaluated by the following items:

- Job performance improvement during the last three months (Substantial/ Modest/ No change)

---

*These regular workshops included free-standing facilities providing sheltered work and sheltered work programs in rehabilitation facilities, but did not include work activity centres.

- Satisfaction with work (Very happy/ Somewhat happy/ Not happy)
- Frequency of interesting work (Usually/Occasionally/Rarely)
- Difficulty of present job (Too hard/ Too easy/ Just right)
- Satisfaction with pay (Very happy/ Somewhat happy/ Not happy)

Clients also evaluated their jobs, tools, and instruction:

- Work preference (Repetitive tasks/ Variety of tasks)
- Frequency client performs work he/she likes best (Most of the time/ Occasionally/ Rarely/ Never)
- Instruction in work performance (Provided by workshop/ Not provided)
- How well instructor knows his job (Very well/ Fair/ Poor)
- Evaluation of ability of instructor (Excellent/ Good/ Fair/ Poor)
- Frequency of client use of power tools or machines (Most of the time/ Occasionally/ Rarely/ Never)
- How well do power tools or machines work (Well/ Fair/ Poor)

Earlier analysis of work psychology studies found seven areas of job satisfaction appearing most commonly: Satisfaction with company and management; with supervision; with co-workers; with financial rewards; with working conditions; with job content; with promotional opportunities and status (Argyle 1972, p. 223). This reviewer noted that most recent studies had used Likert-type scales which offered for each question five alternative responses which formed a continuum assumed to reflect negative to positive feelings.

Major population sample surveys in the United States between 1958 and 1966 (compared in Robinson, Athanasiou & Head 1969, pp.73 & 75), asked questions concerning things liked and disliked about one's job. The items were classified as intrinsic and extrinsic satisfactions, examples given below:

EXTRINSIC -	Economic:	Wages, salary, money
		Job security, retirement benefits, pension
	Non-economic:	Fringe benefits (free lunches, medical care)
		The company, work conditons, equipment
		Physical work, physical work conditions
		Convenience (place, hours)
		Amount of work, pressure, work load
INTRINSIC -	Achievement related:	Responsibility
		Complexity; challenge
		Self-development
		Self-expression, chance to use skills, talents, training

INTRINSIC - Achievement related (CONTD)
    Self-advancement; reward; recognition from others
    Sense of accomplishment
  Affiliation related: Contact with people, particular people
    Friendships
    Superiors, boss, foreman
    Helping people
    Personal relations (passive, active, other)
  Influence related: Independence; self-determination
    Influence; leadership, supervision
    Restraint by others, pressured
    Prestige, status
  Curiosity related: Interesting work
    Novelty, new things, chance to learn
    Variety in work

Additional GENERAL items included 'useful, worthwhile work', 'general fulfillment', religious or ethical factors.

'Job satisfaction' has been used as an alternative term to the idea of 'job involvement' (Rabinowitz & Hall 1977). Similar factors as noted above are reported to have varying degrees of positive relationships with job involvement: satisfaction with work itself, with promotion, with supervision, with people, with other motivational variables (recognition, achievement, responsibility), with company satisfaction (i.e., identification with the employing company). Another analyst (Locke 1976, pp. 1300-1301) saw the concept of job satisfaction as related to but distinguishable from the concepts of job involvement as well as from morale.

The wide range of means for measuring job satisfaction is shown by the critical analysis of measurement scales of occupational attitudes and occupational characteristics (Robinson, Athanasiou & Head 1969). These scales and indices purport to measure general job satisfaction, job satisfactions for particular occupations, and satisfaction with specific job features. Related measures are included for concepts related to job satisfaction (e.g., motivation, alienation), occupational values, occupational status, etc.

The review of literature on job satisfaction showed that although no two studies addressed the same questions, the research generally has three findings in common:

First, the vast majority of workers report some degree of satisfaction with their jobs; only a (small) minority reports dissatisfaction. This finding applies to disabled workers in sheltered workshops as well as workers not classified as disabled in open employment. When based on responses to the single question, the highly positive results may be accepted at face value. Alternatively, they may be biased over-estimates of 'real' levels of job satisfaction. The causes of bias are numerous and include the following in addition to methodological issues:

A simple indication of satisfaction with one's job may be the equivalent of 'grateful testimonials' so often found when querying clients about their satisfaction with welfare services (Larsen et al 1979, p. 198).

Respondents may simply be 'making a virtue out of necessity' and even high positive responses to an overall job satisfaction question (e.g. 'I like it very much') is no more than relative satisfaction:

> 'For the great majority work is at best a source of relative satisfactions to be gained, generally, by getting as much as possible for as little as possible' (Emery and Phillips 1976, p. 16).

A second general finding from the job satisfaction studies is that occupational differences are a prime determinant of level of satisfaction. Again, the causes or explanations are numerous. For example:

Expressed job satisfaction may reflect differences in the objective conditions of work as well as differences in the norms with respect to work attitudes. That is, professional and white collar workers are expected to have high job satisfaction (considering e.g. 'liking for work'); blue collar and manual workers are expected to 'gripe' and be discontented (Blauner 1960).

More recently, Emery and Phillips (1976, p. 14) concluded that the 'blue collar blues' was the dominant problem only for persons in unskilled jobs and possibly the semi-skilled. The semi-skilled and skilled worker groups seemed to be more concerned with moving from indifferent to challenging jobs than from 'unsatisfactory' to 'satisfactory'.

Reported higher levels of job satisfaction for white collar employees may 'reflect judgments of their relative well-being' (Spillane 1980, p. 42). If so, blue collar workers would be expected to respond negatively.

Other reasons for the occupational differences have been suggested as values of prestige (or lack thereof), control (or lack thereof), on-the-job social relations and capacity for integrated work groups and association among workers off-the-job (Blauner 1960).

The general finding of job satisfaction is confounded when a second question is asked, such as type of job preferred. Findings then are that large numbers of workers would prefer a different job or would do something different if they could start working life anew. This response is particularly relevant to blue collar workers (Blauner 1960). As Argyle (1972) has said:

> 'It could be argued that even if the great majority say they are satisfied they ought not to be, in view of the boring nature of their work, or their unpleasant working conditions. On the other hand, observers may fail to appreciate the meaning that can be injected into simple jobs, and the satisfaction that can be obtained' (p. 227).

The third general finding about job satisfaction is an extension of earlier comments about multiple factors or determinants. The review of five major U.S. population surveys concluded that an array of concerns must be kept in mind:

> 'No one factor can be singled out as "the" determinant of job satisfaction; in fact, the evidence examined to date shows little convergence on the separation between "first order" and "second order" determinants. Nor is there any reason to doubt that these factors show subtle changes with variations in the job market and economic conditions' (Robinson, Athanasiou & Head 1969, p. 65).

Achievement factors, pay, social relations on the job, relations with one's supervisors and pressures at work are all prominent sources of work discontent or satisfaction. A major distinction, also occupationally linked, is between intrinsic and extrinsic factors as described above. Other determinants have been suggested: Expectations fulfilled/unfulfilled (Larsen et al 1979, p. 200); a (mis)match of values (Morano 1979); job performance or productivity (Spillane 1980); personality (Spillane 1980).

Unlike the stability of job satisfaction suggested earlier, the values issue may cause change in one's attitude toward work (Morano 1979). Basically, a person's 'core' values do not change significantly after he reaches young adulthood. Therefore if there is ingrained belief and acceptance of dependency, more satisfaction will be found in routine, undemanding work; more dissatisfaction will be found from this work if there is an ingrained work ethic and belief in the 'value of work'. If the person holds a value of need for control, this will result in dissatisfaction with routine assembly, and vice versa.

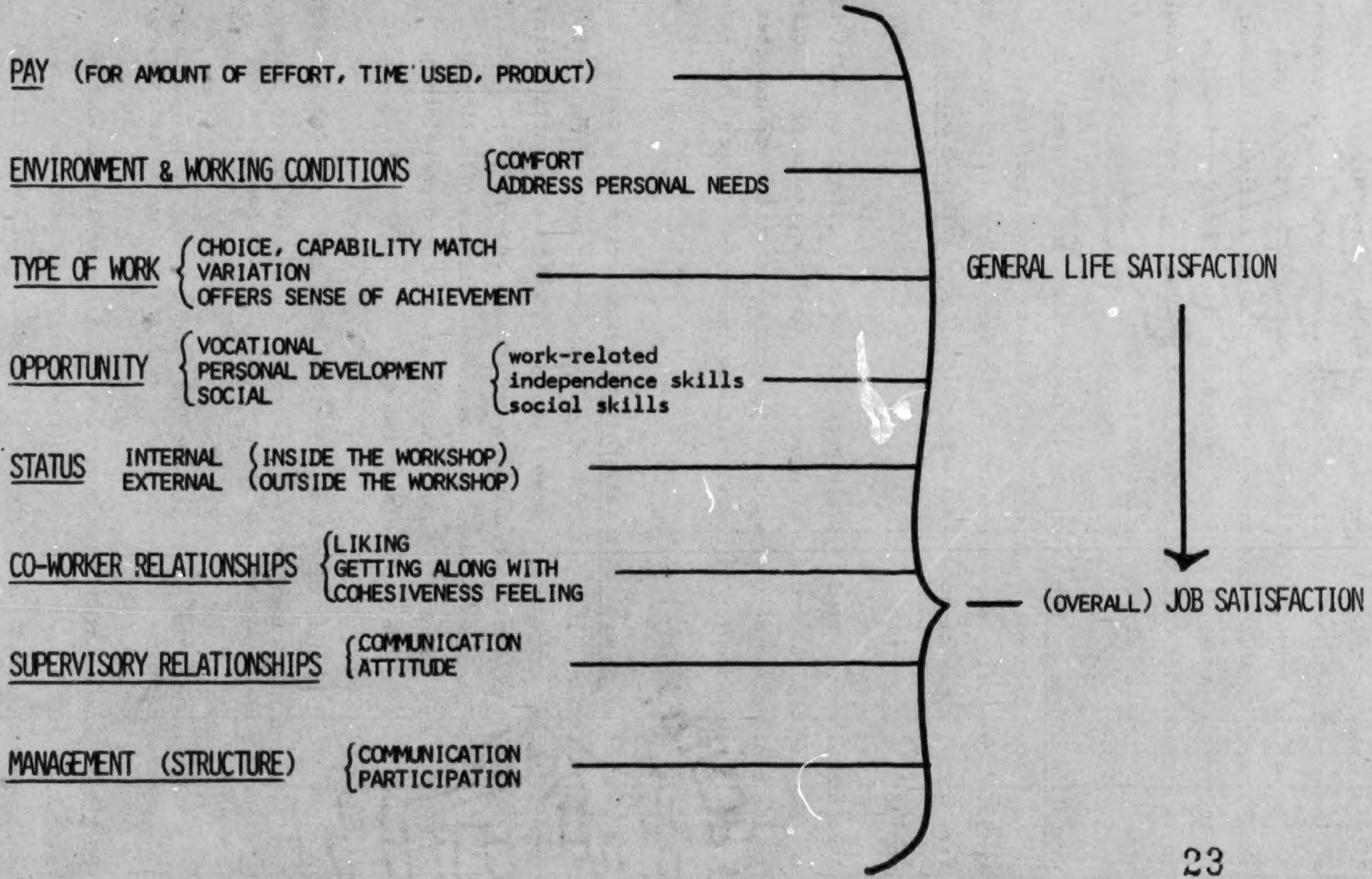
Two added points are made about this satisfaction determinant. One is that the younger generation of workers have new value demands with the result that some organisations are 'embarking on pilot programs of revolutionary change', considering job features such as flexible working hours and job enrichment (Morano 1979, p. 18). The second point is that one's values are not likely to change over time unless there is a significant emotional event in the person's life. This latter idea and correlate of satisfaction would seem to have particular applicability to the sheltered workshop employee group, many of whom might expect emotional trauma along with physical trauma and dysfunctioning.

Factor Relationships

This review of the meaning of job satisfaction resulted in the conceptual framework for the present study diagrammed on the following page. Eight key factors were considered to be important to achieving job satisfaction in the sheltered workshops. These included both extrinsic and intrinsic satisfactions. Most of the workshops jobs could be classified as unskilled and semi-skilled (i.e. 'blue collar'). If satisfaction arose from the same factors as in open employment, it was expected to obtain similar findings:

> 'Some studies show achievement factors to be most important for satisfaction, but they are mainly confined to (usually higher levels of) the white-collar world. Blue-collar workers seem to be more interested in pay rates; but this is not to say that better educated persons are not influenced by money. Their jobs, however, have built-in economic security safeguards to begin with. Social relations on the job also appear as important work concerns, especially for women. Relations with one's supervisors and pressures at work are prominent sources of work discontent' (Robinson, Athanasiou & Head 1969, p. 65).

CHART 1. - Sheltered Workshops Employee Satisfaction Survey Conceptual Framework (Theoretical factors considered important for job satisfaction - no hierarchy implied)


PAY (FOR AMOUNT OF EFFORT, TIME USED, PRODUCT)
ENVIRONMENT & WORKING CONDITIONS
COMFORT
ADDRESS PERSONAL NEEDS
TYPE OF WORK
CHOICE, CAPABILITY MATCH
VARIATION
OFFERS SENSE OF ACHIEVEMENT
OPPORTUNITY
VOCATIONAL
PERSONAL DEVELOPMENT
SOCIAL
work-related
independence skills
social skills
STATUS
INTERNAL (INSIDE THE WORKSHOP)
EXTERNAL (OUTSIDE THE WORKSHOP)
CO-WORKER RELATIONSHIPS
LIKING
GETTING ALONG WITH
COHESIVENESS FEELING
SUPERVISORY RELATIONSHIPS
COMMUNICATION
ATTITUDE
MANAGEMENT (STRUCTURE)
COMMUNICATION
PARTICIPATION
GENERAL LIFE SATISFACTION
(OVERALL) JOB SATISFACTION

If employment in the sheltered workshops is considered the equivalent of industrial work with special concessions being made only in response to problems of physical functioning, the same satisfaction factors should apply to this population. No knowledge was available, however, as to the hierarachy of factors considering the reasons or need for special employment, and the study did not propose any hypotheses about the importance of correlates of satisafction.

Overall employee satisfaction was operationalized as the question:

'Overall, how happy are you at Ability Industries/Press?

Response categories were chosen to be the same as the United States study: Very happy, somewhat happy, not happy (Sheltered Workshop Study, Vol.II 1979).

A related item referred to preferences to workshop attendance but this was used as a first order indicator in the Opportunity factor. Qualitative explanation of the degree of general satisfaction was expected to come from responses to questions about 'suggested changes' and 'advice to new employees'.

The concept of general life satisfaction was selected as a control on job satisfaction. This has often been assessed in general population groups through responses to one or two questions on life satisfaction and personal happiness (discussed by Robinson & Shaver 1973). Job satisfaction is often used as an independent variable affecting the broader issue, just as life satisfaction is used as a correlate or causal effect on the work-related issue.

A study of physically disabled persons (Burnett and Yerxa 1980) asked:

> 'Taking all things together, how would you say things are these days - would you say you're very happy, pretty happy, or not happy?' and
>
> 'In general, how satisfying do you find the way you're spending your life these days? Completely satisfying, pretty satisfying, or not satisfying.'

For this Yooralla study, the questions asked the sheltered workshop employees was: 'Generally, do you feel satisfied about your life?' Response categories were: Very satisfied, satisfied, not satisfied.

Pay

The economic factor - or financial reward for one's work - is one of the primary factors in determining overall job satisfaction. For Australian workers, pay (along with working conditions) was neither the central feature nor main determinant of 'quality of work', but was evident as an important contributor (Emery & Phillips 1976, p. 19).

This attitude might be affected by one's expectation of the likelihood of pecuniary change. Research has found that money is less important to blue collar factory workers than 'solid interpersonal relationships' (e.g. supervision and work relationships), possibly reflecting 'the expectation that changes in the economic status quo are beyond the everyday scope of employees and are often invested in periodic legalistic arbitration far removed in time and space from the factory' (Spillane 1980, p. 46). The most important things - supervision and working relationships - are more immediate and changeable.

> 'The contribution made by wages to satisfaction (or lack of dissatisfaction) may depend on such factors as their level in relation to living standards, their level compared with the level for other similar jobs and persons, and their level in relation to other needs such as security, etc.' (Robinson, Athanasiou & Head 1969, p.86).

An individual's satisfaction with remuneration for his work thus seems to be relative, not absolute. Wages are generally cited as a cause for dissatisfaction rather than satisfaction, and more by workers of lower occupational status (Robinson, Athanasiou & Head 1969, p.55). Since lower level jobs are more frequently poorly paid than work requiring more skills, an underlying lack of instrumental value of wages may be the primary cause of job dissatisfaction since the job may not be among the worker's central life interests. Further, even though the worker may be generally satisfied with his job, payment for work may be insufficient to meet his financial needs.

An additional control on satisfaction with remuneration is the individual's perception (explicit or implicit) of his work value compared to pay received. If he has cause to evaluate his job, he might ask (Lansbury & Prideaux 1978, p. 1):

> 'Does the income from full-time work meet socially determined standards of sufficiency, or the recipient's own definition in regard to adequacy?'
>
> 'Does the pay received for certain work bear an appropriate relationship to the pay received for other work?'

Several aspects are thought to be influential in determining the worker's perception of a fair or 'equitable' wage (Locke 1976, pp. 1321-1323):

- Individual traits such as age, seniority, education, experience;
- Individual actions such as effort, expenditure, output quantity, output quality, creative innovation; and
- Job attributes such as challenge, level of responsibility, time span discretion.

While the weighting given to each aspect varies with the individual, assessment of the equity/fairness of one's wage appears to involve subjective comparison with other similar job situations and workers with whom one is familiar. In terms of worker satisfaction and productivity, payment of wages less than what is considered by the worker to be equitable or fair represents a disincentive to perform according to his full capacity.

Almost all of the disabled employees in Australia's workshops do not receive 'wages' for their work but some type of Commonwealth Government assistance plus a 'productivity payment' optional to each workshop. The 1976 DSS Survey found that the majority of the employees (74%) received a Sheltered Employment Allowance (SEA) as an alternative to the Invalid Pension while at the workshop. Only four per cent of the employees did not receive some assistance, the remaining receiving the Invalid Pension (11%), Age Pension, Sickness or Unemployment Benefit, etc.

Productivity payments averaged $17.34 per week (38% receiving less than $10 per week extra), with the range from nothing to $50 or more. The amount was affected less by workshop size than by profitability and management decision. The method for determining payment was at the option of the workshop (and varied widely between States):

- One flat rate to all employees (16% of the workshops)
- More than one flat rate payment (34%)
- A minimum flat rate plus additional amounts varying according to the individual's productivity, assessed on a regular basis (18%)
- No minimum flat rate, but payment according to regular assessment of productivity (32%).

At the end of June 1980, a larger proportion of workshop employees were receiving a Sheltered Employment Allowance of $61.05 per week. An incentive allowance of $5 a week was payable instead of supplementary assistance. The income test was the same for SEA recipients as for invalid pensioners, but neither the SEA nor the incentive allowance were assessable income for tax purposes. The workshop's productivity payment was added to the SEA to form a composite payment. The amount of productivity payment was not limited but if it exceeded $20 per week, the SEA was reduced $1 for every $2 earned to a maximum earnings of $142.10 where no allowance was payable.

Workshops in Australia can pay less than minimum award 'wages' under Government approval. (In Victoria, a section of the Labour and Industry Act specifically prevents industrial awards from applying to employees in sheltered workshops.) Still, if basic wage rates appplied, sheltered workshops enable handicapped persons to be employed who might otherwise be unemployed (Tisdell 1976, p. 122). Because of the present structure of pension benefits and the Sheltered Employment Allowance, coupled with problems of workshop economic viability, payments can provide only limited pecuniary incentive to workshop employees to work in these settings. Pension benefits are generally available to those who do not wish to be employed in workshops, and workshop payments ('wages') may be only marginally greater than these. Additionally, the instrumental value of such earnings may be offset by costs required from the job (transport, clothing), to the extent that the worker may be less out of pocket by not working.

These rewards in workshops are not commensurate with the effort involved nor sufficient to lift employees 'out of poverty'. Also, since 1967 the rate of increase in income available to workshop employees has been slow (behind the normal indexation rate) with no expectation of significant improvement in the short term (Treloar 1977, p. 49). In practice, partially because of the pension system, 'more productive employees subsidise the least productive in the workshop' (Tisdell 1976, p. 128). Depending upon the value an individual places upon the amount of his pay, sub-standard remuneration may be cause for job dissatisfaction which is behaviourally manifested in two ways: less than optimal productivity and/or absenteeism. Turnover is less likely to be appreciably affected compared to open employment due to lack of alternatives for many workshop employees.

Generally there is no equation between workshop worker payments and those for similar open employment occupations (Hayes 1977, p. 5). For this reason, particularly among employees who have worked in open employment prior to becoming disabled, or those who have had open employment experience as a disabled worker, the relationship between their present 'wages' and their production capacity may be cause for pay dissatisfaction. This is not to say that the individual worker may not have unrealistic expectations of his work value, which may also be cause for dissatisfaction with pay.

The English study related pay and incentives (Schlesinger & Whelan 1979, pp. 66-69). A bonus scheme was thought by some Work Centres to be unfair to the more severely disabled workers. Those Centres that used bonus schemes based financial reward on personal effort, good attendance and general conduct - or made a special Christmas (holiday) payment to all the workers to avoid unfair competition. Other wage supplements included travel and/or clothes allowance, extra pay for odd jobs, and free meals.

Most of the worker sample viewed 'more money' as their greatest incentive (utilised by the Centres through bonuses). A fifth of the workers thought each of the following important incentives: money for Work Centre outings, money to help others (handicapped and non-handicapped), and more to acquire something for the Centre. These were little utilised by the Centres, the second not at all. Non-economic incentives used by the Centres were of little importance to the workers - i.e. pressure to get out a rush job, provision of information on production.

Two areas of wage satisfaction were studied in Yooralla's workshops: Employee opinion was sought as to their happiness with their 'wages' (which included the Government Sheltered Allowance and incentive allowance, and individual productivity payments). Response categories - very happy, somewhat happy, not happy - were based on a similar item used in the U.S. survey (Sheltered Workshop, Vol. II 1979).

Secondly, employees were asked whether they thought they received a fair wage for what they did at work (Yes, No). If a 'no' response was given, a further query asked 'why'. The reasons for 'not fair' wages were expected to relate to:

- Insufficient income to meet needs.
- Perceived inequities between pay and type of work or amount of output.
- Perceived differences in employee workloads (quantity and/or skill required).
- Lower pay compared to other similar work situations (i.e. open industry).
- Poor pay based on work experience or seniority.

Environment and Working Conditions

For this study, the environment was defined as the physical conditions and supports under which work is carried out. Psychological conditions were treated in other factors.

The working environment has been found to be an extrinsic factor affecting job satisfaction more often for unskilled and semi-skilled workers than for employees working in higher status jobs (Robinson, Athanasiou & Head 1969). Although one of the less important determinants (Argyle 1974, p. 228), the physical conditions of work are more likely to be cited as a cause of *dis*satisfaction than of satisfaction. Brown (1954) points out:

> 'In general, workers complain about working conditions, not because they are objectively bad, but because they are worse than they need be in the circumstances. If it is the nature of a job to be dirty or unpleasant very few complaints may be received, but if the job is avoidably dirty or unpleasant there will be justifiable resentment at the lack of good intentions which this implies' (pp. 197-198).

Locke's review (1976, p. 1324) found that physical working conditions, unless they are extremely good or bad, are usually taken for granted by most employees. Value might be placed on those surroundings which are not dangerous or uncomfortable. Brown (1954, p. 187) concurs that the material conditions of the job have no direct relationship on worker morale although they may affect physical health and comfort.

Satisfaction with the work environment has a number of parameters which include health and safety considerations as well as the perceived effectiveness of space, noise levels, toilets and facilities for breaks, and equipment provided for work vary with the size and type of business. The survey of Australian urban workers (Emery and Phillips 1976) found that bad working conditions can be 'a potent source of dissatisfaction but very good working conditions do not do much to create work motivation' (p. 33). For most workers, 'smells' were the only relevant factor of the physical conditions of work to be unsatisfactory; lighting, cleanliness, safety, temperature and noise were at least 'quite satisfactory' to most of the 2,000 workers (p. 23).

The only pertinent question in the U.S. survey (*Sheltered Workshop, Vol. II* 1979) related to 'how well power tools or machines worked'. This was paired with a control question as to how much respondent used the machines (all the time, not at all, etc.).

'Legislation is Essential as the Backdrop to Ongoing Motivated Health and Safety Programs' (Commonwealth, Safety 1979, p.viii). Government in Australia, primarily the State level, has assumed responsibility for establishing minimum standards for health and safety in industrial settings. The primary requirements in Victoria are established under the Labour and Industry Act (administered by the Department of Labour and Industry). The Health Act, Lifts and Cranes Act, Clear Air Act, etc., are other pertinent pieces of legislation. Although the major purposes are to try to ensure safe employment - thereby increasing productivity - usefulness of the legislation is limited by its generality. Management awareness and concern for employee comfort and efficiency are the primary determinants for allocating company resources for safety and comfort over and above the minimum requirements.

The sheltered workshop environment

In addition to legislative requirements for industrial settings, sheltered workshops 'should be designed or modified to meet the needs of the handicapped and should conform to all standards relating to health, safety and accessibility for the disabled' (ACROD, Recommended Standards). The Department of Social Security provides further guidance for new workshops in a booklet, Design and Layout of Sheltered Workshops (1974).

Minimum specifications for an accessible work setting have not been established but applicable design rules are found in Australian Standard 1428-1977, published by the Standards Association of Australia. This code specifies design requirements for minimum space, access and circulation to enable disabled persons to also use buildings and related facilities that are used by the general public. Application of the code is as directed by the responsible Local, State or Federal regulatory body, other standards, contract documents and the like. Portions of the code particularly applicable to the special employment environment are workbench heights, work surfaces, walkways, ramps, toilet and shower design, and so forth. Its application, however, is rather to buildings at the design stage than to alteration of existing buildings where practicality and cost may prevent change from an inaccessible environment. (The Standards have not yet been promulgated in Victorian legislation.)

In addition to these requirements or guidelines, all new facilities subsidised by DSS have to have approval from the Commonwealth Department of Housing and Construction.

> 'The design of a sheltered workshop is simply the design of a modern industrial complex with particular refinements of design that will allow handicapped persons to staff the industry contemplated' (Commonwealth, Design 1974, p.3).

Thus other than special design considerations, the type and range of facilities required by disabled employees do not generally differ from those needed by other workers in an industrial setting. Potential sources of dissatisfaction in the sheltered workshop include those factors unsatisfactory in any work setting in addition to those conditions which hinder rather than advance independent functioning of individual employees.

The design guidelines and other studies offered a wealth of environmental factors which could contribute to employee satisfaction. Considering the standards under which Yooralla's workshops operate, and the restrictions on the amount of information that could be obtained, the study elected to focus on indicators of comfort. Support for independent functioning and productivity as described under the Management factor was a second-level indicator.

Employees were asked for assessment of the comfort of the facilities and conditions (1) for their own work (as okay, or not alright), and (2) for lunch and other breaks (okay, not alright). They were then asked for their comments about personal assistance that employees at the workshop might need. With response categories of yes/no (or 'don't know'), questions referred to enough or sufficient assistance with toiletting, nursing aid (or first aid care), feeding, getting around, and getting jobs set up.

Opportunity

The contribution of opportunity to overall job satisfaction is less clear than for other factors as it can be conceptually defined in various ways. Opportunity can lead to feelings of achievement or satisfaction of curiosity if the job offers new or challenging tasks and the employee's performance is successful. If not, opportunity can lead to dissatisfaction just as much as if the worker had no chance to use his skills in a personally valued fashion. Opportunity can also lead to influence-related satisfaction when the worker is involved in decision-making (employee participation) or choice about his work. The sequence of events is as follows:

1) An opportunity (e.g. to advance, to perform a more complex task) is offered by management, possibly through the supervisor.
2) If the potential results from the opportunity - the 'rewards' - are judged by the worker to have high personal value, he accepts the opportunity and applies his skills to meet explicit (or implicit) criteria.
3) If he is successful in meeting the criteria, the employee receives the valued reward from management (supervisor) or through some external change - i.e., the opportunity has been offered and accepted, followed by a valued reward.
4) If he is not successful, the employee may be penalized ('punished') or no valued change occurs.

If at step (2) the worker chooses not to accept the opportunity (because the reward is not valued or for other reasons), his status may be the same as the failure in step (4), that is, he may be penalised for not making an attempt or may remain in the status quo.

'Rewards' include promotion and verbal recognition (Locke 1976, pp. 1323-1324), prestige, status, better working conditions, job security, greater responsibility and more autonomy in choice of one's work process and pace (Robinson, Athanasiou & Head 1969). 'Penalties' include the worker's own feelings of failure, lowered status in the work place, decreased chance for future opportunities, various forms of 'punishment' (e.g. increased supervision, more demanding work). Reward obviously contributes to job satisfaction; penalties and punishment, to job dissatisfaction.

The present study of special employment has placed these 'rewards' and 'penalties' in the broader context of vocational, social and personal development opportunities. This assumes that disabled employees have a wider range of needs than regular industrial workers, i.e., disabled persons have more difficulty in developing vocational skills and finding desired employment; their interpersonal contacts are fewer and there are more restrictions on the means for acquiring social and survival skills.

The Recommended Standards for Sheltered Employment (ACROD) include the following provision:

> 'The program provided by the service should be designed to develop to the maximum each employee's potential for employment either on the open labour market or in sheltered employment.'

Further, under sections on Rehabilitation and Recreation:

> 'Each organisation which provides sheltered employment also should provide, ancillary to its workshop activities, a vocational rehabilitation service including such medical, paramedical, counselling and social work services as may be required, with a view to assisting handicapped employees to perform at a higher level in sheltered employment, or where possible, to graduate to open employment.
>
> For many handicapped people a sheltered employment service provides an opportunity for social contact. This should be recognised and participation in social and recreation programs fostered.'

Vocational opportunity refers to work tasks within the workshop and those activities intended to help the disabled employees move out into regular competitive employment. Generally 'sheltered workshops, partly through necessity, are creating an environment which mitigates against the transition to open employment' (A Conference 1975, p. 77). The reinforcing conditions include the pay-allowance system and limit on earnings, minimum levels of social interaction, attitudes of workshop managers and personnel, and lack of training and concurrent support services including continuing /further education (Cropley et al 1977; Recurrent Education 1978). The same conditions apply to increased opportunity within the workshop for those employees who probably will remain in a special employment setting.

Due to the restricted formal education and socialisation experiences of many disabled persons, there is a heightened need for compensatory developmental opportunities for workshop employees. In this respect, continuing/further education is closely linked with vocational opportunity to the extent that it encompasses courses 'community oriented' or directed towards 'personal development', as well as those related to vocational skills (Duke 1976, p. 21). The application of 'too specialized a training' without broader personal development can restrict the individual's flexibility and adaptability (Lengrand 1975, p. 106) - personal qualities necessary for integration into the work environment as well as for independent community living.

Satisfying vocational opportunities arise from the workshop's success in performance of key functions additional to providing the work opportunity:

- Assessment of the individual's skills, capacity and interests;
- Work training;
- Job or production design;
- task assignment; and
- Job development and placement outside the workshop.

A United States survey found that there was 'considerable demand' for evaluation services in sheltered workshops in addition to needs for work adjustment or personal adjustment, skill training, and related work habits (A Study 1969, pp. 108-109). A more recent review of U.S. sheltered workshops by the General Accounting Office found that the 'better opportunities for competitive employment as the Congress intended' were not being fulfilled through failure of responsible agencies to conduct periodic reevaluations of the potential of the disabled employees (US. GAO 1980).

The situation in Australian workshops is probably not significantly different from the U.S. experience for either initial employee assessment or reevaluation. The DSS Survey of Sheltered Employment (1977) found that most workshops did do some form of initial assessment, 70 per cent formally. A fourth of these assessments looked only at work-related skills; three-fourths considered both social/independent living skills and work-related skills. Roughly half of the workshops offered structured work skills training programs.

Adaptation of the working conditions to meet individual needs of disabled employees has been discussed above under the Environment factor as a major difference between sheltered workshops and open industry. It is only mentioned here under Opportunity as the current challenge to the workshops is 'to design man-machine interfaces that maximize the productive potential of handicapped workers' (Pomerantz & Marholin 1980, p. 267). Both task assessment and worker assessment (*A Conference* 1975, p. 57) are necessary for job and production design.

Chronologically, task assignment may precede or follow training and job design. The issue for job satisfaction is the individual worker's opportunity to make a choice among diverse work tasks and processes as opposed to unilateral assignment by management (supervisor). 'Choice' or input into the task decision is satisfying to the individual in a work environment which offers varying forms and degrees of control over the conditions of work. Particularly in the industrial setting, the worker 'is at the bottom of the bureaucratic hierarchy; he is a person for whom action is constantly being originated, but who himself originates little activity for others' (Locke 1960, p. 345).

Workshop statistics (e.g. *Survey* 1977) have shown that few disabled employees move out into open employment. Analysts imply there is little opportunity to do so, given the lack of appropriate training, counselling and job development (*A Conference* 1975; *National Conference* 1977; Limbrick 1977; Brolin 1980). Thus vocational opportunities cannot be separated from other needs for social and developmental opportunities as these relate to job satisfaction in the workshops. For example, an employee with suitable work skills but without personal confidence cannot take advantage of any opportunity to move from the 'relative independence' of the workshop (Cannon 1977, p. 10) without encouragement and means for developing those skills necessary for survival in the competitive market.

The U.S. review found:

> 'Movement of people from the workshop into competitive employment is usually more dependent on community job opportunities, efforts to develop and/or identify job opportunities, and readiness of the handicapped person rather than on the type of workshop employment provided' (US. GAO 1980, p. 2).

Those employees for whom the workshop will remain 'a way of life' have equal needs for these opportunities, but 'structured programs' are offered in less than 60 per cent of Australia's workshops. The type varies (e.g. medical, psychological, continuing education). In addition to the work skills noted above, the most common program is for 'social skills' (in roughly half of the workshops). The least common program is for 'independent living skills', offered by less than a third of the workshops to only 15 per cent of the total workshop population (Survey 1977, pp. 48-53).

Industrial Recreation has been found to have values for improved worker performance and improved employer-employee relationships. In addition, the workshop has been defined as the logical agent for meeting special recreation needs of its employees as it plays a vital role within the life style of those individuals (A Conference 1975, pp. 119ff). A large proportion of Australian workshops does provide some recreation programs or facilities, thus offering desired social opportunities (Survey 1977, pp. 53-55), but these are usually not tied in to the structured programs intended to meet individual need.

The U.S. workshop survey (Sheltered Workshop, Vol. II 1979) addressed these opportunity issues by asking the disabled employees about the effects of their workshop experience on:

- Help in obtaining work outside (yes, no)
- Help in their gaining confidence in their ability to work outside (yes, no)
- 'Readiness' for outside employment (yes, no)
- 'Job improvement' over the last three months (substantial, modest, no change)
- Instruction in work performance (provided by the workshop, not provided)
- Social adjustment change (substantial improvement, modest improvement, no change, worsened.)

The present study used indirect indicators of satisfaction with Opportunity:

Given work that they already do, employees were asked: 'Are there other jobs in the workshop you can do and would like to do?' A yes/yes response pattern was assumed to be an indicator of dissatisfaction with opportunity within the workshop.

Employees were later asked: 'Is there anything you would rather do than attend this workshop?' A 'yes' response was followed by questions on the type of preferred activity and reason for the choice. If the stated preference was to work outside, additional questions elicited the respondent's opinion about the value (help) of the time in the workshop related to the preferred work, and information on his efforts to get work outside. Satisfaction with opportunity for external work would be assessed from the responses to the question cluster.

Second-level indicators of opportunity satisfaction were to be extracted from responses to two open-ended questions:

> 'For you, what is the most important thing about the workshop?'
>
> 'Is there anything about ..... [the workshop name] .. you would like to see changed?'

Type of Work

The 'good job' has been described as one which offers variety, learning 'elbow room' (freedom), mental challenge, and a desirable future (to get ahead or be promoted) (Emery & Phillips 1976, p. 34), unique expertise, control and authority (Norton, Massengill & Schneider 1979). Most of these aspects of job satisfaction are classified as intrinsic or satisfying to one's ego, not related directly to the work or its tangible benefits. Most satisfying are aspects leading to a sense of achievement and satisfaction of one's curiosity (Robinson, Athanasiou & Head 1969).

Locke's review (1976, pp. 1319-1320) found work attributes related to work interest and satisfaction included: opportunity to use one's valued skills and abilities; opportunity for new learning; creativity; variety; difficulty; amount of work methods and work pace (autonomy); job enrichment (including increasing responsibility and control); and complexity. The common element was mental challenge, or use of one's conceptual faculties.

The absence of adequate challenge or the presence of a work task which can be performed automatically (with no effort, skill or thought required) leads to boredom, the converse of interest. Challenge of the work and its acceptance leads to job involvement. Too much challenge can lead to a feeling of failure and frustration if one is not able to cope with the pressure or does not have the necessary skills. In addition to appropriate levels of challenge and successful task performance, preconditions for job satisfaction are for the individual to find the work personally interesting and meaningful. Absence of physical strain is important to some workers, presumably based upon the individual's need for bodily wellbeing.

The research reviews have shown clearly that there are individual differences, occupational differences, and cultural differences in the attributes noted above as major contributors to job satisfaction. One reason has been suggested as differences in the meaning of work; Employees at higher job levels are more likely to want challenging work which is viewed as pleasurable in itself; employees at lower job levels may be more likely to view their work only as a means to keep busy or to earn a living (Locke 1976, p. 1321). Alternatively, some people, such as those of lower intelligence, tend to prefer repetitive tasks rather than varied work although standaridized work methods can be a cause for reduced job satisfaction (Argyle 1972, p. 229).

Work in special employment

In contrast to the definition above of a 'good job', a high proportion of the work in special employment settings calls for unskilled or semi-skilled labour, and is by nature repetitious. The tasks are easily learned and require little individual training. Lower expectations of disabled employees from workshop personnel are a spin-off from this low skill level, leading to a maintenance of jobs with low incentive (Limbrick 1977, p.15).

An extensive review of U.S. workshops described the major activity as supervised porduction of non-habilitative, non-normative jobs (A Study 1975, p.14). A later survey (Sheltered Workshop, Vol II 1979) found that the majority of the workers thought their work was 'usually interesting', and was 'just right' in terms of difficulty (neither too easy nor too hard). They preferred a variety of tasks, not repetitive, and performed the work each liked best most of the time or, at the least, occasionally.

Sheltered workshop specialists have expressed continuing concern over the type of work available to Australian workshops and the lack of opportunities offered to the disabled employees (e.g.National Conference 1977). The work activity in special employment depends first upon the organisation's decision to engage in (1) industrial sub-contract work; (2) renovation/salvage of used materials and their processing for re-use; and/or (3) primary manufacture of new goods. Each activity has advantages and disadvantages (e.g., opportunity for choice of work, control of production, costs). The choice is based upon assessment of the capacities and potential of the disabled manpower pool; the available resources (e.g. equipment, raw materials); the market for workshop products; and potential labor market for employee placement after training. In addition, the workshops must run their operations in the most businesslike fashion, that is, meeting the special needs of the disabled employees without exploitation and without sacrifice of economic principles.

The major organisational problem with sub-contracting - the primary type of workshop activity - is the 'alternating feasts and famines' over the course of a year or longer period of time. It has been found virtually impossible to maintain a constant stream of work with resulting negative effects on productivity of workers which is already low, and on the tasks that may be required (Hayes 1977, p. 17).

Workers in sheltered employment can be laid off in slack periods just as in any industrial setting but efforts usually are made to divert them to different tasks to maintain their 'guaranteed income' and incentive payments as available (Cannon 1977, p. 12). This may result in the workshop's seeking contracts requiring lower and lower levels of labour skill, or 'forced nonproduction' as the alternative to inappropriate contracts. Most Australian workshops still report they are unable to obtain sufficient work for their disabled employees (Survey 1976, p. 74).

The combination of tedious tasks and extensive downtime have been cited as the cause of a high frequency of inappropriate behaviour (Pomerantz & Marholin 1980, p. 269), an indicator of job dissatisfaction. For some disabled workers at least, repetitive work is not as tedious as for able-bodied workers, and contracts and tasks must be found that allow for this difference in addition to the longer training time and additional supervisory attention (National Conference 1977, p. 46).

In summary, workshop employment involves a number of inherent difficulties to achieving employee job satisfaction although, as in any work setting, individual workers are affected to varying degrees by:

- Restrictions on the variety and complexity of work.
- Varying amounts of down time.
- Restrictions on use of individual capabilities from level of task performance required.
- Production demands which lead workshops to tend to persist in using particular workers in particular tasks; and similar opportunity issues related to assessment of individual capability, training and matching of task and worker.

The current study was interested in this factor with intrinsic satisfactions of achievement and curiosity as related to the type of work in Yooralla's workshops. Satisfaction indicators were selected as:

- Keeping busy 'most of the time' (frequently,occasionally,rarely).
- Interesting work (same time response categories).
- Variety in work (yes, yes/no, no, too much variety).

Analysis was planned according to the type of work reported by each respondent. An individual's opinion of his own capability was implicit in his responses but objective, assessment information was not to be available for the study.

Second-level indicators of satisfaction, primary to other factors, were:

- Change of sameness in work (usually changes, occasionally changes, rarely changes); and
- Job preference in the workshop, i.e. 'Are there other jobs in the workshop you can do and would like to do?' (Yes, no to each of the two question parts).

Status

Status, simply defined, is respect from others and reflects a universal social need (Argyle 1972, p. 102). Status and prestige are related to influence as an intrinsic component of overall job satisfaction (Robinson, Athanasiou & Head 1969). This social factor has been thought to be the best explanatory factor for job satisfaction because of the rank order correlations between occupational status and job satisfaction in those persons holding certain status (Blauner 1960, p. 344).

In the work place, an individual's status is based on his contributions to the purposes of the organisation, and may derive from his skill, his knowledge, his generosity, his ability to make others laugh - a myriad of reasons. In larger groups or systems, status cannot easily be assigned and may be based on external symbols such as the individual's position in the organisation, his autonomy, the canteen where he has his tea (Brown 1954, pp. 138-139).

In the larger society, an individual's status reflects the status given his occupation, and there is close correspondence between that social status and satisfaction with different jobs. The relationship holds regardless of the pay or degree of (un)pleasantness of the job. For example, 'higher status' teachers receive less pay than many 'lower status' manual workers; within the world of manual work, occupational differences reflect prestige among working class jobs, e.g. a skilled craftsman will have higher status than a factory operative (Blauner 1960, p. 344). Even workers with ascribed low social status can be highly satisfied with their jobs becuase they feel they are productive members of that society.

When a person is unemployed, he feels he is an unequal member of the society which ascribes the lowest status to an occupation non-position. If he becomes unemployed, he feels he has lost status regardless of a prior low occupational status.

A person with a disability who works in a sheltered workshop holds a certain external social status from (1) his functional capacities which deviate from the norm; (2) his presence in a 'special'setting, currently subsidised as 'charity', even though this is an attempt to follow cultural expectations of production; (3) the usual lower status occupations found in a workshop; (4) employment in a 'business' which can offer its product at cut-rate prices since costs are lower than the norm (although this is usually not the case); and (5) the sub-standard amount of pay for work. Social stigma attached to workshop employment has been suggested as a deterrent to some persons seeking even limited work (Tisdell 1976, p. 123).

These departures from normal work routines and settings further differentiate workshop employees from non-productive persons with disability, and from members of other minority groups who at least have their cultural traditions to provide them with group identity and sanction (Neff 1968, p. 232). Employment in a sheltered workshop may provide disabled persons with group identity but not one that results in removal from social isolation.

Within the workshop, status variations also occur paralleling the usual occupational statuses (e.g. semi-autonomous clerical employees or machine operators have higher status than assembly line workers) with additional affect from individual characteristics the same as in any work place.

The present study included only limited aspects of status as related to job satisfaction. Identification with a valued social status was indicated in the responses to the question, 'For you, what is the most important thing about the workshop?' Production-oriented answers were assumed to reflect a more highly valued occupation than purposeful social aspects (e.g.'chance to be with others'). 'A place to go - to get out of the house' would reflect less social status although still more than if the respondent was unemployed.

This value was reinforced through a second-level indicator of activity preferred to the workshop. Movement out was assumed to suggest a striving for higher status.

The perceptions of significant others - family and friends - about the individual's employment in a sheltered workshop were thought to be important determinants of his job satisfaction. Employees were asked:

> 'How do you think other people outside feel about the workshop and the work you do?
>
> What about your family? Your friends?'

Responses were expected to reflect both positive and negative social attitudes toward disability and concomitant status ascribed to workshop employment, confounded by special problems posed by persons in close relationship with the disabled employees:

> 'It almost seems as if there is a silent conspiracy to keep handicapped people "in their place". It is an unfortunate fact that some parents try to get a handicapped dependent into a sheltered workshop because they want them in a "safe place". Sometimes parents oppose the transfer of a handicapped person to a job in the outside world' (Cannon 1977, p. 9).

Two second-level indicators referred to status internal to the workshop:

A perception of fair treatment by supervisors was seen as having status accorded to the employee either as a human being or one with special attributes. The complementary question, 'Why do you think this is so?', would provide the explanation.

Questions on employee 'say in the running of the workshop' would indicate the employee's perception of their status in relation to management.

The remaining three factors form a cluster of three inter-related levels of interaction occurring in the industrial setting: worker-worker (Co-worker Relationships), worker-supervisor (Supervisory Relationships), and worker-management (Management Structure). Job satisfaction at each level has been used in this study as separate factors which would contribute to overall employee satisfaction.

Co-worker Relationships

'Work' has been defined as a social activity (Brown 1954, p. 187) with the social conditions being a prime determinant as to whether or not an individual likes or dislikes his job. Co-worker relationships occur in two ways: First, task assignment by the work situation designates - formally or informally - other workers with whom an individual will have contact (e.g. through placement at an assembly line or in a worker dyad or larger group; through responsibility for part of a flow of work with input from and output to other workers). This is a functional relationship among 'workers' and each person is valued for what he can do for the other rather than as an end in himself (Locke 1976, p. 1326). Secondly, informal social groups or personal friendships may form among employees within the general work milieu. This is an entity relationship based on similarities in attitudes, values, interests (Locke 1976, p. 1327). Logically, the greatest satisfaction from co-worker relationships should occur when both the functional and entity attractions are high.

The social system of the working group - individuals cooperating under the direction of a leader - has received much research interest due to the marked effect of composition and inner dynamics of the group on productivity and job satisfaction (Argyle 1974, pp. 104ff; Goldhaber 1974, pp. 209ff). For example, because of the nature of work groupings, conflict may arise between workers who hold different expectations of individual performance in the group. Cohesion within such groups depends primarily on the extent to which its members conform to group norms, attitudes and values. The inability of a worker to internalise and conform to group expectations usually results in the individual being rejected by his fellow workers. His feelings from being 'sent to Coventry' may make him leave the company.

Generally however:

> 'Members of cohesive groups interact with one another more, particularly on sociable matter irrelevant to the task; they interact more smoothly, they enjoy being in the group, and feel less tension at work. They get considerable social satisfaction and social support from their group, and thus are less likely to seek a personal relationship in other social contacts at work . . . They cooperate smoothly over the group's work, there is more division of labour, they help each other more, and there are reciprocated arrangements for helping. There is greater conformity to group norms, e.g. on output levels' (Argyle 1974, pp. 119-120).

While the work group can provide functional assistance on the job as well as emotional support, an individual's need for worker affiliation might also be heightened depending upon the type of work, its pressures and dangers, and the nature of management. Affiliation then becomes counter-productive as the worker spends a lot of time with other people, tries to establish intimate relationships, prefers to be popular than to be a leader, and is more concerned with social interaction in the group than with the work at hand (Argyle 1974, p. 101).

Satisfaction with co-worker relationships is strongly related to occupation and to type of work, varying from the most important factor to comparatively low value. It is greatest when a worker has the desired kind of interaction with desirable people. The work group itself is more important in some kind of work than others (e.g. more important in work normally carried out by teams; less meaningful and important to assembly-line factory workers (Argyle 1974, pp. 233-234).

'Feelings between people' in the work place was only one question reported in a Social Climate index for Australian workers (Emery & Phillips 1976, pp. 45ff). More specific information was available for unskilled to skilled workers who had been found to be more likely to 'do what they had to do and not get involved with other people whilst on the job'(p. 49). The implication from the 'loner philosophy' was the greater chance for these lower status workers to be driven into this kind of 'blind alley of life'.

An extension of satisfaction with co-worker relationships is found in association among workers off-the-job. This is reportedly higher for workers in 'occupational communities' where for its members the occupation is the reference group. In their off-hours, participants 'talk shop' and socialise more with persons in their own line of work than with a cross-section of occupational types (Blauner 1960, pp. 350). While rarely occurring among urban factory workers, the concept of an occupational community could apply to the sheltered workshop setting.

Workshop co-worker relationships

Sheltered workshops provide opportunities for both work and social associations but satisfaction with each of these aspects depends upon the extent to which the individual can have 'the desired kind of interaction with desirable people' (Argyle 1974, p. 233). The workshop attended may employ persons with a single type of disability- physical, intellectual or psychiatric; functional or cosmetic - or multiple disabilities, or a mix of disabled and non-disabled persons. Worker preferences as to co-workers probably are not generally accounted for in task assignment or establishment of work groups although social choice exists. While the work option is not generally available in open employment either, working relationships within the workshops may be a particularly potent source of conflict. Co-worker relationships involve those aspects described above which apply to any work setting and aspects unique to the special employment setting and disabled employees.

Research on general attitudes of disabled persons has had competing findings. On one hand, at least for acquired conditions, the social world of the disabled person dwindles and there is more reliance on relationships with other disabled persons to maintain 'a matrix of interpersonal contacts' (Christopherson, cited by Dixon 1977, p. 309). In contrast, like non-disabled persons, disabled persons hold negative attitudes towards other disabled persons - as a group or limited to specific impairments and disabilities. There is, in effect, a hierarchy of disability acceptability or favourability.

For example, a recent study (Dixon 1977) found persons with a visible disability (e.g. spinal cord injury) had a more positive attitude toward association with disabled persons in general than did persons with a marginally visible disability (e.g. arthritis); emotionally disturbed persons were significantly less willing for such an association. The explanation seemed to some from a combination of visibility and severity factors. Between the groups, variation also occurred with persons with less visible disabilities expressing less preference toward members of their own disability group than persons with more visible disabilities.

Some individuals may experience particular difficulties at work:

> 'Professionals who deal with the mentally retarded or the emotionally disturbed are familiar with the many instances in which such persons could not maintain employment chiefly because they were subjected to so much "kidding" or outright hostility that the work environment became intolerable. Even when these extremes are not encountered, the limited, immature, or disturbed individual may demand from his fellows more than they can reasonably give, or may find them more indifferent to his personal problems than he can tolerate' (Neff 1968, p. 125).

Other studies have pointed to failure of an adult to have developed 'behavioural coping' ability due to the interpersonal environment as a child when normal socialisation was interfered with by parental fears or expectations. This could also carry over to the work setting through parental over-support (Roessler & Bolton 1978, p. 49).

While homogeneity is neither necessary nor expected in the work setting or work group, the most satisfying co-worker relationships would result from consideration of these attitudinal and personality factors and special means for managing known problems. Indicators of co-worker satisfaction were selected as what seemed to be the three most important elements of intrinsic affiliation-related satisfaction of sheltered workshop employees:

> The degree to which the employees 'got on' with each other (Usually well, some problems, not very well);
>
> Whether or not the employees helped each other 'a lot ' (yes,no); and
>
> The degree to which the employee (respondent) had friends among his/her fellow employees (Yes, a lot; Yes, a few; No).

Supervisory Relationships

This factor was defined as direct interaction between the respondent and his/her supervisor(s). As with co-worker interaction, both functional and entity relationships are involved (Locke 1976, pp 1325-1327). Functional relationships are work-related and pertain to the specific tasks supervisors and employees require of each other to fulfill work obligations. Entity relationships may develop out of these if mutual interests and attraction result in development of friendships.

Both factors are important in determining compatability and quality of employee-supervisor relationships. Functionally, the supervisor's role is to facilitate employees (subordinates) in achieving their important job values whether task-related (e.g. interesting work), or as rewards for task performance (e.g. pay raises, verbal recognition). Awareness and genuine consideration for employees as individuals with particular attitudes and needs are also required if the employee is to like the supervisor as a 'person'. Thus one's supervisor may be liked 'as a supervisor' but not 'as a person', and vice versa. Overall liking would require high levels of attraction in both functional and entity relationships.

Supervisors are generally appointed by management rather than by the workers and represent formally imposed leadership. This differs from the informal leaders work groups tend to establish for task performance or social purposes. Depending upon the style of leadership required and desired, supervisory behaviour can create harmony or be a cause for dissatisfaction. First, the contribution of supervision to job satisfaction is controlled by the situation:

> 'It is probably reasonable to say that the type of supervision which produces the most satisfaction in a given group of workers is one which is keyed to the nature of the job, the needs and personalities of the workers, and the personalities of the managers' (Robinson, Athanasiou & Head 1969, p. 86).

Further, a supervisor may be personally influential in effecting job satisfaction in three areas (Lansbury & Prideaux 1978, pp.66-67):

a) The way in which he handles problems and treats employees individually, e.g. reflecting his fairness, his interest in employees developing their skills;

b) The contribution he makes to facilitate a high quality of work life, e.g., by encouraging improved relationships, showing trust and support, and encouraging and stimulating involvement and participation; and

c) The contribution he has made to improving physical work conditions, job design, and administration of personnel systems.

The key supervisory functions critical to determining the physical environment and social climate of the workplace are:

- Consideration or psychological support - characterised by approval of the worker and his efforts, good personal relationships with workers, and fair and equitable treatment.
- Facilitation - characterised by well organised appropriate work routines, training, equipment and performance standards.
- Participation - obtaining and providing employees with the opportunity to be part of the firm's decision-making team.

Research findings cited by Argyle (1972, pp. 136-139) indicate that supervisory behaviour can directly affect employee behaviour (level of output, absenteeism, labour turnover) as well as job satisfaction. Individual workers do respond differently to particular styles of supervision. Some workers may require more direction than others, while some may feel the need for greater autonomy in their work. Commenting on attitudes to authority, Neff (1968, pp. 123-24) pointed out the importance of workers coping with and adapting to work demands. These are placed on him via direct or indirect supervision, and there is a need for employees to establish and maintain some balance between dependence or supervision and independence in their work. An inability to make the necessary adaptation results in mutual dissatisfaction.

Workshop supervisory relationships

The role of the supervisor in the workshop setting is defined by management, the nature of the work, and the number and types of employees. Although the great majority of people employed in workshops are disabled, supervisory staff as well as management generally are 'able-bodied' or non-disabled. In Australian workshops, disabled personnel comprise

81 per cent of the work force but only 14 per cent of managers, supervisors, and 'case workers' (Survey 1977, p. 58). The supervisory personnel are further differentiated from the disabled workers by the pay scale which is not controlled by a 'means test'.

Employee disabilities and accompanying dependencies (physical, emotional, etc.) create special difficulties for development of a satisfying employee-supervisor relationship. The supervisor may evidence patronising or paternal attitudes, or tend to authoritarian behaviour without recognition of employee rights and capabilities of each individual. One workshop has described the problem as the amount and type of supervision required by the worker:

> 'The ultimate with us all should be the ability to work at our levels of responsibility with little or no direct supervision and this should also be the aim of our handicapped workers. Whilst I will agree not everybody can achieve this result, nevertheless we should strive for it . . . . Of course the problem of motivation of workers and their appreciation of the abstract and often to them intangible reward of a job well done without direct supervision is not always easy to achieve regardless of whether the worker is handicapped or not. Here we must seek advice or guidance the same as normal industry' (Grover 1979, p. 40).

Qualifications of workshop supervisors are more likely to be trade-related. No standards require special knowledge of disability or skill in dealing with interpersonal problems. Less than half of the workshops in Australia provide for special counselling services for only a third of the disabled employees (Survey 1977, p. 51). In the rest at least, the supervisor may have to deal with personal problems if requested by the employee or if they affect work behaviour.

Satisfactory functional and entity relationships with the supervisor(s) have been examined as the employee's perception of (1) the instructor's ability and how well he knew his job, and (2) the fairness of the supervisor's treatment of employees in the workshop (Sheltered Workshop, Vol. II 1979). The present study addressed an intrinsic affiliation-related indicator of satisfaction with this relationship as 'fair treatment by the supervisor' (very fair, fair including 'fair BUT', not very fair). A non-economic extrinsic indicator was identification of who the respondent would normally go to if he/she had a 'problem about work': supervisor, manager, social worker, other employee, parent, etc. Job satisfaction was assumed if the supervisor was the primary source of help, or at least the first source from whom the employee sought help.

Management (Structure)

The concern in this factor was with the interaction of the structure of the organisation (represented by management practices) and needs and values of the employees. This is a functional, impersonal relationship and does not require a bond between individuals based upon mutual liking or admiration. With the exception of pay in sheltered workshops, the organisation holds ultimate control and can determine the nature of the individual's work tasks, his degree of responsibility, his promotion opportunities, and the physical conditions of work (Locke 1976, p. 1327). The present study has included satisfaction with many of these aspects under other factors, and has defined the Management factor as the organisation's attitude toward meeting individual needs of the disabled employees, and the value placed on employee participation in decision-making.

Individual need

Concern for individual need is used here as an extrinsic, non-economic satisfaction. This involves, for management, operating the special industrial facility in a businesslike fashion while maintaining:

- Full awareness of the capabilities and problems of each employee;
- Understanding of alternative means for addressing the problems in a personally enhancing manner - not demeaning the individual; and
- Willingness to provide necessary resources.

Disabled employees may need personal care or mobilility assistance to maintain a work role. For example, management may choose to meet needs for personal care (such as toiletting, feeding or nursing) through provision of special staff, or through assigning the responsibility for care to other disabled employees. The latter procedure was found to be preferable to regular work tasks in the British Work Centres (Schlesinger & Whelan 1979, p. 84).

Special job design may be required including analysis of what is to be done, how it might be done, and the necessary supplies and equipment. Deviations from the normal work setting might be required for individual employees in simplification of tasks, rearrangement of layout, work reorganisation, and/or adaptation of workbench, jigs, etc.

The English survey (Schlesinger & Whelan 1979) found that there was a major need in those Work Centres for more concern about adapting the job to the person in order to achieve greater work satisfaction and productivity (pp. 69ff). In Australia, ACROD's Recommended Standards for Sheltered Workshops include a provision, in addition to design or modification of the facility to meet special needs of the handicapped, that:

> 'Except where it is considered necessary to serve the interests of specific groups of employees, the workshop should use labour-saving tools, equipment and machinery of a standard type and to the same degree as are used in open industry where similar work is performed (p.3).

Prior to making adaptations to the 'standard' equipment and work process, the workshop would have to provide for sufficient medical, psychological and practical assessment of vocational capacity and potential, and continuing assessment of individual performance. In 1976, most of the 125 Australian workshops surveyed (Survey 1977, pp. 48-49) provided an initial assessment, 70 per cent formally and 24 per cent informally. Three-fourths of the formal assessments included both social/independent living skills and work-related skills. Also, of the 125 workshops, 77 per cent undertook regular formal assessment, presumably for periodic redetermination of need (work skills training, counseling, continuing education, medical treatment, etc.). Structured programs with various content to meet individual needs were provided in 57 per cent of the centres.

An unmet need for assessment and training has been one of the themes in the ACROD conferences on sheltered workshops and special employment (A Conference 1975; National Conference 1977). The former situation is not unique to Australia as shown in a 1980 United States General Accounting Office report which found that legislative requirements for annual reevaluation of handicapped workers in sheltered workshops has not been followed for some 42 per cent of those requiring re-evaluations (over 11,000 workers). As a result, those workers had not received the maximum opportunities for competitive employment intended by the Congress. A larger proportion of workers, over 80 per cent, reported they were provided instruction in work performance by the workshop, by instructors generally evalauted as knowing their job well (Sheltered Workshop, Vol. II 1979, p. A131).

Considering the importance of all of these factors, the present study elected to include 'training' under the satisfaction factor of Opportunity, and to focus under Management on satisfaction with personal assistance offered or made available by the organisation. Respondents were asked to assess how well needs of the employees at the workshops were being met in the following areas: Toiletting; nursing aid (or first aid care); feeding; getting around; and getting jobs set up. The questions asked only for a yes/no opinion as to the sufficiency of assistance or help in each of these need areas. No direct question was asked about 'assessment' of individual need under the assumption that if a high level of satisfaction was found for personal assistance, this must result from management interest.

Employee participation

Initial stimulus for development of employee participation in Australia was provided by academics and European multinational business interests. Continuing attempts of the business community to find ways of resolving industrial problems (low productivity, motivation, etc.) and trade union recognition of the benefits and merits of employee participation have added impetus to the movement. In 1978, the Commonwealth Government announced a policy which had as the main thrust encouragement and assistance to employers and employees to develop joint work arrangements 'leading to an improved quality of worklife for employees and the more effective use of resources' (Gunzburg 1980, p. 4). The National Employee Participation Steering Committee was established to set programs in motion to achieve the aim set forth in that policy.

Reflecting political alliance, the various States differ in their involvement with participative principles as shown through legislation or policy (Giles 1977, pp. 40-50). Victoria in 1980 has not made a commitment. Given, though, the efforts of the various interest groups - academia, management, Government, and unions - an environment of greater participation has been created, and heightened worker expectations. Special pressures include changing attitudes toward authority, the impersonal nature of some enterprises, a widening gap between the reality of work and employees' expectations of it, the need for greater efficiency, etc. (Employee Participation 1979, p. 2).

For purposes of this study, *employee participation* was defined as *employee opportunities to influence the decisions that affect them their work and their work environment*. The focal point is a greater sharing of responsibility for decision-making, involving different levels of employees and different *levels* of decision making (*Employee Participation* 1979, p. 1), or different *degrees* of participation.

The *levels* of participation vary with individual organisations (Lansbury 1980, p. 2). At the lowest level, participation may pertain only to aspects of the *individual* worker's relationship with the organisation, the way in which a job is performed. Participation at an *operational* level encompasses decisions concerning the immediate work environment and organisational requirements of its small individual formal (work) groups. At a *collective* level, participation centres on primary issues such as wages and conditions concerning employees collectively and the organisation, or, implementation of policy. At the *organisational* level, participation generally involves consultation regarding strategies and actions toward achievement of organisational policies and objectives.

The *degrees* of participation reflect a continuum of control which may be permitted employees in individual work situations (Lansbury 1980, p. 4; Lansbury & Prideaux 1978, pp. 49ff):

1. *Reporting*, where employees are advised of management decisions although employee opinion may or may not have been canvassed prior to these.

2. *Consultation*, where employee opinions are sought and considered by management in making decisions - although responsibility and accountability for outcome rest solely with management.

3. *Negotiation*, where decisions are implemented after final agreement has been reached between management and employees (or their representatives). A process of bargaining and compromise controls the decision-making process, while responsibility for outcomes does not necessarily rest with employees.

4. *Co-determination*, or full participation involving both management and employees (or their representatives) in joint decision-making, equal responsibility resting with both parties.

Full participation assumes a number of employee predispositions: (a) that the work and organisational affiliation are among the employees' central life interests; (b) that there is a high degree of employee commitment to the organisation; and (c) that employees are quite prepared to accept responsibility for the effects of their decisions (Gillespie 1978, p. 240). The degree and scope of participation is dependent on situational factors - organisational size, method of operation, existing legal requirements, moral pressure for representation, the prevailing economic climate - and on employee-related factors.

In contrast to smaller employee groups where personal participation is possible, larger worker groups are generally forced to rely on representative participation. Representation however poses a number of potential difficulties, e.g. individual employees may not perceive the representative as 'representing them'; communication and feedback may be poor; representatives may lack knowledge or lose sight of employee viewpoints, or may allow themselves to be co-opted to management's views.

While the opportunity to contribute to decision making may exist for any worker, the extent to which each wishes to be involved - either directly or indirectly - varies:

> 'Experience and research in many countries shows beyond doubt that one cannot assume that all employees want to take part in managerial functions, particularly those which concern the wider aspects of the business. Some are more focused on their lives off work; some prefer simple jobs without worries; and some prefer to keep to themselves rather than interact with others' (Walker n.d., p. 7).

Workers elected to representative bodies tend to have common characteristics (e.g. to be male, skilled, more educated, and to have longer service in the enterprise). Most workers, however, are interested in their immediate job situations and at least want to be consulted about changes. Participation extending beyond the job (individual) level of the worker requires the capacity to absorb and understand information, the focus and terminology of which may be somewhat alien. The context in which this information is provided (especially if coming from management) may not give employees opportunity or authority to effectively assist decision making.

While labeled a 'movement', Giles (1977, p.15) found several years ago that there was little evidence supporting the thesis that workers themselves were the primary proponents of increased employee participation in Australia. This could be partly attributable to a 'fatalistic contentment' with work, or the fact that some employees did not view their work as one of the more important features of their lives. Alternatively, some individuals could lack knowledge of the process and/or have low regard for its effectiveness as a method of insuring attention to individual needs.

Another analyst of the industrial scene(Lansbury 1980, pp. 24-27) observed that the most notable advances in employee participation in Australia had occurred at the level of shop-floor or work-place (e.g. election by work groups of their own supervisor or foreman, creation of semi-autonomous work groups, restructuring of jobs to provide greater opportunities of choice and initiative). Indirect consultation was considered to be the most prevalent form (of 'industrial democracy') involving committees of management and employee representatives in discussion of issues related to working conditions and other enterprise-based matters. The scope of this 'joint consultation' generally did not extend to more central issues such as negotiation over wages. Self-management, such as found in traditional co-operatives, had not been as attractive to Australia as in other countries such as Britian and Scandanavia.

Workshop employee participation

As noted earlier, sheltered workshops generally operate under financial limitations. Factors of economic viability can overshadow their primary concern - the enhancement of the disabled person's ability to work.

> 'The purpose of the workshop is to provide meaningful employment for the handicapped, not to make huge profits at the expense of the handicapped worker. Thus for the employment to be meaningful it must involve the workers at all levels' (Grover 1979, p. 39).

This can be accomplished through a 'workers committee' such as reported for Western Australia (described by Grover), or through the alternatives that are being used in regular industrial settings (described above).

In a discussion of current dilemmas in sheltered employment programs, Hall (1977, p. 20) noted:

> 'The voice of one of the key parties to that operation - the "employees" themselves - has so far scarcely been heard, at least at a national level. Perhaps the National Advisory Council for the Handicapped project on consultation, so far concentrating on the blind and the visually handicapped, will offer "models" for consultation which can also be applied to the consumers of sheltered employment services.'

Employee participation in Yooralla's workshops is comparatively new. The first formal recognition of the organisation to the principle occurred in 1978 in the form of elected representatives. The three 'workshop reps' at each of the two study workshops hold meetings with their manager, the General Workshops Manager, and the agency Executive Director to discuss many work-related issues. For the employees at these workshops, employee participation may offer intrinsic satisfaction through wielding influence - although, as with other ego satisfying aspects of the job, its weight or contribution to overall job satisfaction might be less than for workers who perform more skilled tasks. Allowing this, participation was also seen as an indicator of management concern for the employees' feelings and opinions through giving these 'subordinates' more influence.

Study restrictions limited the scope of questions in this area, and the survey project elected to obtain opinions about what should be done, than about satisfaction with what had been done. Analysis would relate the opinions to the Management satisfaction factor. Three questions therefore asked:

> 'How important do you think it is for employees to have a say in the running of the workshop?'
> (Very important; important; not important; no opinion)

If the response was in the 'important' range:

> 'On what issues in particular?'

In all cases (whether considered important or not important):

> 'Can you tell me why you say this?'

Models for Analysis

The Satisfaction Factors outlined earlier in Chart 1 are expanded in the model in Chart 3 to include Indicators and Pre-Determined Variables relating to the disabled employees. The present study limited its data to only a few employee characteristics but others are recommended for replication and causal analysis. Comparison of employee satisfaction in several workshops should also include organisational variables in the model (e.g. number of employees, staff:employee ratio, staff qualifications, employee pay, other benefits such as transport).

An alternative model for analysis is shown in Chart 2 which ascribes intrinsic or extrinsic qualities to each Indicator (Robinson, Athanasiou & Head 1969). This approach may have more value for analysis related to a selected motivation theory but, as with other aspects of job satisfaction research, few studies have used the same items or features of hypothetically ideal jobs to enable comparison between samples.

CHART 2. - Satisfaction Indicators According to Extrinsic (Job-related) or Intrinsic (Ego-related) Satisfactions, and Assigned Study Factor
(Secondary indicators and factors in *Italics*)

SATISFACTIONS	INDICATORS (Question Number)	STUDY FACTOR
EXTRINSIC		
Economic	Happiness with wages (8)	PAY
	Wage considered 'fair' (9)	PAY
Non-Economic	Comfort of facilities (10 & 11)	ENVIRONMENT *(MANAGEMENT)*
	Sufficient personal assistance (12-16)	MANAGEMENT *(ENVIRONMENT)*
	Preference to attending workshop (27)	OPPORTUNITY *(STATUS)*
	Help with work problem	SUPERVISORY REL. *(MANAGEMENT)*
	Time occupied ('kept busy') (2)	TYPE OF WORK
	Workshop job preference (6)	OPPORTUNITY *(TYPE OF WORK)*
	Most important thing about workshop (23)	*(OPPORTUNITY)*
INTRINSIC		
Achievement-related	Time occupied ('kept busy') (2)	TYPE OF WORK
	Workshop job preference (6)	OPPORTUNITY *(TYPE OF WORK)*
	Being productive important (23)	STATUS
	Preference to attending workshop (27)	*(OPPORTUNITY, STATUS)*
	Helping each other (18)	CO-WORKER REL.
Affiliation-related	Fair treatment by supervisors (7)	SUPERVISORY REL. *(STATUS)*
	'Getting on' with each other (17)	CO-WORKER REL.
	Helping each other (18)	CO-WORKER REL.
	Friendships with other employees (24)	CO-WORKER REL.
Influence-related	Family and friends attitude (25)	STATUS
	Employee participation (20)	MANAGEMENT *(STATUS)*
Curiosity	Interesting work (3)	TYPE OF WORK
	Variety in work (4)	TYPE OF WORK
	Change in work (5)	*(TYPE OF WORK)*
GENERAL	Overall happiness at the workshop (21)	OVERALL SATIS.
	Preference to attending workshop (27)	*(OPPORTUNITY)*
	Suggested changes (28)	*(OVERALL SATIS)*
	Advice to new employee (29)	*(OVERALL SATIS)*

CHART 3. - Analytic Model for Relationship of Pre-Determined Employee Variables, Satisfaction Factors and Indicators, and General Life and Overall Job Satisfaction.

PRE-DETERMINED VARIABLES

AGE
SEX
MARITAL STATUS
DIAGNOSIS / DISABILITY
MOBILITY AIDS / PROBLEMS
EDUCATION/TRAINING HISTORY
ACCOMMODATION
TRANSPORT
WORK HISTORY
TYPE OF WORK (WORKSHOP)
JOB PERFORMANCE
WORKSHOP ATTENDANCE
ATTITUDE
MOTIVATION

SATISFACTION FACTORS & *INDICATORS

PAY: *WAGE FAIR FOR WHAT IS DONE
*HAPPINESS WITH AMOUNT WAGES

TYPE OF WORK: *INTERESTING
*TIME OCCUPIED ('KEPT BUSY')
*VARIETY IN WORK
**Change in the work*
**Workshop job preference*

STATUS: *FAMILY ATTITUDE
*FRIENDS ATTITUDE
*BEING PRODUCTIVE IMPORTANT
**Fair treatment by supervisors*
**Employee participation*
**Preference to the workshop*

SUPERVISORY RELATIONSHIPS: *FAIR TREATMENT
*HELP WITH WORK PROBLEM

MANAGEMENT (STRUCTURE): *CONCERN FOR INDIVIDUAL NEED: JOB SET-UP
TOILETTING NURSING AID FEEDING GETTING AROUND
*EMPLOYEE PARTICIPATION

ENVIRONMENT & WORKING CONDITIONS: *FACILITIES 'OKAY'
**Sufficient personal assistance*

OPPORTUNITY:
*WORKSHOP JOB PREFERENCE
*PREFERENCE TO THE WORKSHOP
**Most important about the workshop*
**Suggested changes*

CO-WORKER RELATIONSHIPS:
*'GETTING ON' WITH EACH OTHER
*HELPING EACH OTHER
*EMPLOYEE FRIENDSHIPS

GENERAL LIFE SATISFACTION

↓

OVERALL JOB SATISFACTION

METHODOLOGY

Planning the survey recognized methodological problems that could be associated with obtaining opinions from the employees, and that asking questions might be construed by the employees as threatening to their work security and/or work relationships. The following parameters were used in an effort to optimise respondent receptiveness and participation:

1. Employee participation would be voluntary and no personal identification would be given to responses.
2. Data collection would consider communication and attention problems faced by some employees, and would consist of personal interviews.
3. Differences between data collectors and employees should be eliminated as much as possible by employing persons with disability as interviewers if such qualified persons were available.
4. As employees would have to leave their work stations to participate in the survey, the time schedules for data collection would be cleared by both supervisors and interviewees.

This section describes the techniques (Interviewer's Manual 1969; Holmes 1979) used to implement these parameters.

Clearance for the survey

Project staff believed that it was important to ensure that the employees had adequate knowledge of the study, its purpose, and what was expected of them in the interview situation. Direct contact as described below was used to stimulate employee interest. Support of the elected workshop representatives was solicited to provide further endorsement for the project and on-the-ground reassurance of the employees.

During the time the conceptual framework and interview schedules were being developed, meetings were held to explain the survey and enlist cooperation at the workshops. On April 24th, the Director of Research and Development discussed the proposal with the Workshops General Manager. It was agreed that meetings should be held at each workshop with the employee representatives, manager, Yooralla Executive Director, and research staff (interviewers). On April 28th, the first meeting was held at Ability Press (one disabled interviewer attending).

On May 7th, a meeting was held at Ability Industries (two interviewers, one disabled, attending; apologies from the Workshops General Manager). The agenda and results at both workshops were similar:

- Discussion of the general purpose of the study, types of questions to be asked, alternative means of recording responses, and sample. It was proposed that half of the employees at each workshop (a 50% random sample) would be interviewed initially but the opportunity to participate would be extended to all employees if permitted by research resources.
- Recognition of a concern for confidentiality and discussion on how this could be handled.
- Approval-in-principle of the survey by the workshop representatives with operational approval pending their attitude after participating in an interview pretest. The workshops representatives thus had control over the future of the project, negating the idea of employees being 'guinea pigs' or 'research subjects' (cited by Weiss, Bauman and Rogers 1971, p. 45).
- Discussion of procedures for notifying the workshop employees about (1) the survey and its purpose, and (2) their selection to be interviewed and their interview appointments.

Pretesting of the interview schedule and method of interviewing was carried out with the three workshop representatives at Ability Industries in late June, and with the three representatives at Ability Press two weeks later. Three interviewers conducted a pretest at each location. (In addition, pretests at Industries included an observer from the research staff.)

Pretests at both workshops were intended (1) to ascertain whether the draft of questions obtained answers to the research questions, and (2) to involve the workshop representatives in the interview situation. Both interviewers and interviewees were "debriefed" immediately following completion of the interview schedule. Their observations were used to make minor revisions to obtain a more unified document, improve clarity of questions and introduction, increase interviewer understanding of the research issues (questions and response problems), and obtain workshop representative approval to proceed with the survey.

To assist one of the interviewers who could not directly record written responses, pretests tried two alternative methods: the use of a cassette recorder, and the use of a scribe who did not participate verbally in the interview. Comments made by the interviewees indicated that the latter method was less threatening and, for them, the presence of a third person did not restrict the flow of the interview as greatly as the mechanical method. Transcription of taped responses was also found to be difficult after interviewing participants with speech difficulties, and loss of information ruled out use of this method.

For interviews at Ability Industries, arrangements were made to use a vacant office on the first floor of Ability House in the Social Work Department. (This department had also arranged for an accessible office for a disabled research officer in the same area.) At Ability Press, for reasons of privacy and quiet, the first aid room which doubled as the supervisor's lunchroom was used. No interviews were scheduled at either location for times which would conflict with those set down for employee or supervisor tea or lunch breaks.

Concern was expressed by representatives that some employees had already participated in a number of other surveys in the workshops over the last two years and might not wish to take part. Accordingly, in mid-July when project staff were ready to commence scheduling interviews, an informal meeting was held with all employees at Ability Press. The survey's purpose and value were explained by the Director of Research and Development, and interviewers were introduced to employees. A confirming memo was given to the workshop representatives to be posted on the employee noticeboard. At Ability Industries, the representatives did not think a group meeting was necessary and took responsibility for informing employees about the survey. They also posted the explanatory memos on the noticeboards in the two workshop areas.

The order of interviews is described later in this section. The general procedure for inviting an employee to participate and notifying him of his interview time was similar at both workshops: The day before a proposed interview (or the morning or afternoon before), a suggested schedule was given to the workshop manager (by memo or in person at Industries; over the phone to Press). At this time it was verified that the employee was expected to be at work and could leave his job for the period required to complete the interview.

It was the manager's prerogative to change the day's schedule if he felt an employee's absence would affect production. Where employees were unavailable for reasons such as illness, transport strikes or holidays, these interviews were rescheduled at a later day. Additionally, if it was known that an employee had been away from the workshop for some days/weeks, his interview was scheduled long enough after recommencement of work to allow him time to settle back into the workshop environment.

When each day's schedule was established, invitational memos addressed to each employee were given to a workshop representative for delivery to the employees. (At Ability Industries, this was sometimes handled by the Workshop Manager.) When notified of his interview time, it was the employee's prerogative to decline the invitation and refuse to participate in the survey. Only three of the employees available during the data collection period who were given the scheduled invitation to participate refused to do so.

Following the arrival of each employee in the interview room, the interviewer made preliminary introductions and outlined the purpose of the survey, requirements of a participant, and the confidential nature of the responses. Before the first data item, employees were asked if they had any further questions or needed clarification about the survey. This was done immediately to the best of the interviewer's ability. On completion of each interview the participant was asked if there were any further comments he would like to make, and thanked for his assistance.

Interviewers were instructed to terminate an interview at any time - during the preliminary introduction or during the question period - if an employee seemed unduly worried about the situation. Although several employees were reported to be concerned initially, none who came into the interview rooms refused to participate or requested that their responses be cancelled.

Interviews at Ability Press were carried out between 22 July and 19 August and at Ability Industries between 18 July and 20 August. Follow-up acknowledgements to the employee participants, workshop representatives, and managers were sent the latter part of August. Research Department staff compiled a preliminary report for feedback to the workshops employees-survey participants, delivering this two-page document to the representatives, workshops managers and agency administration before the December holiday break. Little response was obtained by the Department from the workshops about the preliminary report.

In mid-April 1981, the Director of Research and Development hand delivered draft copies of the first four sections of Part I to the workshops representatives and managers. Additional copies were given to agency administration in accordance with the standard procedure for report review. All of the reviewers were asked to look for errors in factual statements and to indicate areas that need clarification. Their comments were obtained a week later, mostly through interview with a research staff member, and incorporated as minor corrections to the final draft. The printed report will receive similar distribution and will be readily available to survey respondents, agency staff and administration, and other interested persons and organisations.

Confidentiality

Survey participants were assured of the confidentiality of their responses - both in writing and verbally; by research staff and Society administration; to the workshop representatives at the time the survey was proposed and, individually, to each participant at the time of their interviews. A number of standard techniques were used to ensure anonymity.

Interviewing was done in the privacy of rooms set aside for this purpose. Each interview was assigned a numerical code which matched a list of employee names held only by the Director of Research and Development. Confidentiality was stressed to participants at the time of their interviews, and most responses were coded numerically after interviews were completed.

Reporting of survey results protects individual anonymity and presents only tabulations of group responses. To further ensure confidentiality, responses from both workshops have been combined for this two-part report and feedback to workshop employees.

Results presented in this way should not be misconstrued. Report findings should be interpreted as applying to the broad metropolitan workshop program of Yooralla Society, but not individually to either workshop.

Data Collection Issues

Based on project staff knowledge of the study population, the following assumptions were made:

- The research question of employee satisfaction would be 'sensitive' to many respondents, most of whom had few if any options for work.
- A sizeable number of respondents would have difficulty with communication - comprehension and/or expression - caused by physical or intellectual impairments.
- A goodly proportion of respondents would have situational disability (relating to endurance or environmental stress) or impairments of attention.

The desire to obtain opinions from as many employees as possible directed the selection of survey design. The problems above directed the use of personal interviews for data collection despite their higher cost than questionnaires. These two methods seem to offer little difference in the quality of information although other research has suggested that 'data accruing from anonymous questionnaires may be more valid with respect to sensitive or potentially embarrassing questions than face-to-face interviews' (Bausell and Rinkus 1979, p. 479).

Interviews offered advantages of direct contact to obtain a larger response rate; use with persons with various levels of understanding; sensitivity to misunderstanding by respondents and an opportunity to clarify or interpret; and flexibility to explore areas in which specific questions could not be pre-determined. Interviews also were the more appropriate technique for investigating complex, emotionally laden subjects which presumably included 'special employment'. An interview would encourage the greatest possible freedom and honesty of expression from respondents, whose verbal reports would be accepted at face value (Selltiz, Wrightsman and Cook 1976, pp. 296-98).

An extensive review of research on job satisfaction (Locke 1976) noted: 'It is unfortunate that interviews have been used relatively infrequently to assess job satisfaction' (p. 1336). Supposed reasons for not using them - problems of objectivity and disagreement among interviewers - have been controlled as much as possible in the present study. A third problem of man-hours required was resolved in the agency's concern over the question.

The research staff did not assume that 'being interviewed is an inherently satisfying experience and ordinarily constitutes its own reward' (Caplow 1956, p. 165). In contrast, it was thought that 'answering questions accurately and completely can be a demanding task for respondents, and their inability or unwillingness to meet these demands appears to be an important source of response invalidity' (Cannell, Okensberg and Converse 1979, p. 74). Acceptance of the invitation to participate in the survey could imply commitment to 'good respondent performance', and this was probably true for many employees. For others, the social costs (negative judgments by fellow employees, workshop representatives, or even the interviewer) may have been a more powerful operator. Data from these employees, and from those with communication problems, may be less reliable and valid but this has not been tested.

A time limit of thirty minutes was initially proposed considering stress tolerance of the disabled employees, and general worker fatigue particularly in the case of respondents scheduled for times toward the end of the work day. The interview schedule was revised, through testing, until an interview lasted approximately twenty-five minutes with some run-over due to slow speech of some respondents or verbosity. The interviews conducted by signing lasted about forty-five minutes.

The settings for the interviews - a neutral office zone away from the work place at Industries and in a common area at Press - also served to help the relative statuses of the interviewer and the respondent approach equality (cited by Weiss, Bauman and Rogers 1971, p. 42).

Interviewers

> 'Most survey researchers believe the adage that practice makes perfect, or at least makes for improvement. Thus, they expect seasoned interviewers when compared with less experienced ones to be more skilled at adapting to various interviewing situations, more at ease in interacting with respondents from various social classes, and more proficient in using unbiasing procedures. Interviews conducted by an experienced staff usually present fewer problems in coding; the responses are clearer and more adequate to the objectives, contingencies are followed more strictly and, with a minimum of omitted questions, there are fewer non-codable replies.
>
> Data from methodological studies which were recently examined raised questions about the positive effects of experience in interviewing' (A Summary of Studies 1977, p. 30).
>
> 'There is little agreement among survey technicians as to whether indigenous interviewers can establish better rapport and, therefore, obtain more accurate information than can other types of persons. Past experience differs widely, reflecting perhaps the ability of the interviewers and the quality of their training and supervision rather than the factor of race or ethnic stock alone. Apart from political or public relations considerationsthere are a priori reasons for assuming that, given adequate training, interviewers of a specific race or culture will be better with their own group' (Household Survey Manual,1969, p. 30).

Research on survey methodology suggested that 'peer interviewers' - in terms of physical disability and the interviewers' capacity for open employment - would be the least threatening type of interrogators to the workshop employees, an assumption extrapolated from various reviews comparing characteristics of interviewers and respondents (usually race or social status). For example, indigenous interviewers used in surveys of low-income populations offered a special capacity to contact respondents and establish rapport (Weiss 1974). In addition, this analysis and other studies found that racial or ethnic similarity may be of equal importance (Weiss, Bauman and Rogers 1971).

Initial planning for the project therefore included use of disabled interviewers if a sufficient number could be obtained, and a non-disabled Research Officer in the Department who would participate in interviewing as a control. The parameter to eliminate differences by virtue of disability between data collectors and employees was only partially successful. Using word-of-mouth for recruitment, the final interview panel consisted of four males and one female: The non-disabled Research Officer (male) noted above; a severely disabled male who lived in an electric wheelchair, was totally dependent upon physical help, was trained in clinical interviewing, and had been employed early in project planning to work with the regular Research Officer on the formulation of the conceptual framework and interview schedule, and on control of data collection; a disabled male independent with the aid of a manual wheelchair, with experience in legal analysis; a non-disabled female with little prior experience in research or contact with physically disabled persons; and a male with hearing impairment recruited from the Adult Deaf Society for interpreting and signing for employees who were deaf or very hard of hearing, with experience in counselling persons with this disability.

The five interviewers ranged in age from the early twenties to the early thirties, and all held tertiary qualifications in various fields. All of the interviewers were capable of competitive employment although this would have to be limited and/or required special adaptations for those living in wheelchairs. Four of the five had prior general knowledge of the workshops and various types of contact with some of the employees.

Before the pretests, the first four interviewers were verbally briefed on the study, their role expectations, the schedule and procedures to be followed. Ample opportunity was provided for interchange among them and pretesting of the draft schedule under the dual purpose of familiarization with the questions and time-tests of the interview.

After the pretests and debriefings, the interviewers again discussed their individual experiences to standardise question interpretation. Particular care was given to delimiting interviewer expectations (Hyman 1975) and to the method of asking questions, prompting and probing in order to minimize misunderstanding and inconsistency in the formal interview sessions. To maintain this consistency, an interviewer was used as a scribe as required by the most severely disabled interviewer.

The interpreter for the deaf did not participate in the pretests but was given full opportunity to become thoroughly familiar with the interview schedule and intent of each question. It was then his responsibility to translate concepts planned for oral presentation into sign language.

Later comparison of the response patterns between these interviewees and those responding orally did indicate a few differences other than might occur from individual experience and opinion. These resulted from interviewee fatigue as well as interpreting difficulties, but were not so severe as to significantly bias the results.

During data collection and conduct of the interviews, continuing contact between interviewers and the Research Department helped to maintain interviewer enthusiasm, and to deal with problems as they arose. Although the interviewer panel was not balanced in terms of sex and disability status, analysis of the results so far has not indicated any significant differences from interviewer effect. (See later Assessment of Methodology.) The very inbalance of the panel may have presented what has been descibed as the best solution to the problem of interviewer bias, that is, 'a proper balancing of the ideological composition of the field staff' (Hyman 1975, p. 35).

In their contact with the workshop employees, interviewers followed a mixed 'personal-impersonal' style (Cannell, Oksenberg and Converse 1979, pp. 23ff). While demonstrating interest, respect and empathy for the respondents ('a permissive atmosphere free of apparent criticism'), the impersonal orientation stressed only the task of getting good information. The use of a standardized schedule did not require interviewer behaviour more restricted than in normal interviewing conditions and an 'intrusive' approach was used only as necessary to obtain a response without discomfort to the respondent.

Additional bias might have occured through better understanding by the interviewers gained over time (Pihlbald, Rosencranz and McNevin 1967). This was not evident in the analysis of the completed schedules, and Analysis has assumed that the interviewer sample selection order has indeed been random.

Sample Selection and Interviewer Assignment

As obtained from workshop records, the study population consisted of 151 regular employees: 85 at Ability Industries (56.3%) and 66 at Ability Press (43.7%). This population did not include persons (1) who were attending the workshop for the purpose of a work trial (who had not yet reached regular employee status); or (2) who were irregular employees (attending only when their health permitted).

Initial plans called for a survey sample which would be enlarged if resources permitted. To obtain a respresentative sample, proportionate stratified random sampling (Moser and Kalton 1973, p. 85) used workshop attended as the first selection criterion and sex as the second order criterion. A table of random numbers was applied to each of the four strata (males and females at Industries and at Press) and sub-samples were drawn proportionate to the population in each strata. The two sub-samples at each workshop were combined and checked for representativeness according to means of age and length of employment.

The order of employees interviewed was determined as follows:

The 50 per cent samples at each workshop were used as sampling frames and employees randomly assigned to each interviewer with the following exceptions:

> An interviewer was replaced if he disqualified himself as knowing or having a personal/social relationship with the workshop employee which might tend to bias the responses.
>
> Employees with hearing problems were selected for interviewing by the signing-interpreter (Ability Industries only).
>
> One disabled interviewer found the facilities available at Ability Press were not appropriate to his needs, and conducted interviews only at Industries.

Interview scheduling - day and time at each workshop - followed, first, the same random order as sample selection, alternating males and females until completion of the latter samples; further adjustments were made for (1) worker availability, (2) interviewer availability (considering other work or medical commitments and the total interview timetable), and (3) project promise not to take more than one employee out of a workshop at any time nor at tea and lunch breaks.

An employee was 'not available for an interview' if - at the proposed time - he/she could not leave the work station; or was absent from the workshop due to holidays/leave, illness, transport strikes; or was not attending the workshop due to a work trial outside, in open employment or another workshop. Four employees in the initial sample were 'not available' (due to outside work trial), and were replaced in the sample following the same random selection procedure.

Each employee had the right of refusal to participate in the survey but would not know if he/she had been selected for the sample until receipt of the interview appointment-invitation. One employee in the initial sample refused and was replaced under the same random selection procedure.

Before completion of the sample interviews, additional resources enabled the project to expand the survey to cover the workshops population, i.e. to offer an invitation to participate to all employees in both workshops. This expanded the sampling frames for random assignment of interviewers and included replacement of employees who were 'not available' during interviewing of the 50 per cent sample.

Interview scheduling continued to use the same criteria as for the initial sample with an additional exception to random assignment of employees to interviewers: One interviewer conducted the final few interviews for rescheduled employees.

Overall, rescheduling was required for roughly a fifth of the population, and was not successful for 11 per cent (16 employees) before termination of data collection. This included five employees out on work trial in open employment (four out at the time of sample selection and a fifth who went out before selection for interviewing). These employees might have been removed from the sampling frame as not being in the current population of 'regular employees' since their return to the workshop was uncertain.

All interviews were conducted in single sessions with the exception of one. This was split around an afternoon tea-birthday celebration which had not been mentioned at the time of schedule approval and acceptance of the interview by the employee. From one to six interviews were conducted by each interviewer during each visit to Press or to the research office at South Melbourne. Scheduling generally allowed for a thirty-minute break between interviews, or longer, for the interviewer to review the written responses and rest. Interviewer fatigue generally was not a major problem, except, possibly, for the interpreter but this did not appear to affect reliability and validity.

When data collection was concluded, 132 regular employees had been interviewed: 74 employees at Industries (56.1% of the total respondents) and 58 employees at Press (43.9%). The employees interviewed comprised an 87.4 per cent sample of the population (87.1% at Industries, 87.9% at Press), shown in Table 1.

TABLE 1. - Survey participants and non-participants

Employees	Ability Industries		Ability Press		Total	
Interviewed	74	(87.1%)	58	(87.9%)	132	(87.4%)
Refused	2	(2.4%)	1	(1.5%)	3	(2.0%)
Not available	9	(10.6%)	7	(10.6%)	16	(10.6%)
Total	85	(100.0%)	66	(100.0%)	151	(100.0%)

Employees who were not interviewed were a biased group, over-representing female and males at Ability Press. Despite this, there was no significant bias in the final group of respondents on either the first or second-order sample strata selection criteria (workshop attended and sex) or on representative controls (age and length of employment). Table 2 compares the sample to the population on these variables.

Data Management

Following the completion of each interview, the interviewer checked through the data collection instrument to ensure all responses had been correctly recorded. A sheet attached to the rear of the schedule was completed giving his/her comments on the interview and any difficulties encountered during the interview which might influence the reliability and validity of data collected. Each interview was checked again with a designated member of the research team to ensure recording of data was not ambiguous, and was clear for coding purposes. At the end of each day's interviews, all work completed that day was turned into the Department of Research and Development.

Schedules were coded by regular staff in the Department, who also obtained additional descriptive information on each employee from workshops employee records, (age, year of employment, primary diagnosis, school and work history). Tabulation, analysis and this report were the responsibility of the Research Officer who doubled as interviewer, and the Director of Research and Development.

TABLE 2. - POPULATION AND SAMPLE FROM EACH WORKSHOP: SEX, AGE, LENGTH OF EMPLOYMENT

	ABILITY INDUSTRIES				ABILITY PRESS				BOTH WORKSHOPS			
	REG.EMPLOYEES (n=85)		RESPONDENTS (n=74)		REG.EMPLOYEES (n=66)		RESPONDENTS (n=58)		REG.EMPLOYEES (n=151)		RESPONDENTS (n=132)	
	f	(%)	f	(%)	f	(%)	f	(%)	f	(%)	f	(%)
A. SEX												
Male	52	(61.2)	48	(64.9)	48	(72.7)	41	(70.7)	100	(66.2)	89	(67.4)
Female	33	(38.8)	26	(35.1)	18	(27.3)	17	(29.3)	51	(33.8)	43	(32.6)
B. AGE												
16-20 years	14	(16.5)	13	(17.6)	15	(22.7)	15	(25.9)	29	(19.2)	28	(21.2)
21-25 years	22	(25.9)	17	(23.0)	14	(21.2)	14	(24.1)	36	(23.8)	31	(23.5)
26-35 years	27	(31.8)	22	(29.7)	13	(19.7)	11	(19.0)	40	(26.5)	33	(25.0)
36-50 years	19	(22.4)	19	(25.7)	13	(19.7)	10	(17.2)	32	(21.2)	29	(22.0)
51 yrs & over	3	(3.5)	3	(4.0)	11	(16.7)	8	(13.8)	14	(9.3)	11	(8.3)
Mean	29.7 yrs		30.3 yrs		32.7 yrs		31.2 yrs		31.0 yrs		30.7 yrs	
Median	27.3 yrs		27.5 yrs		26.5 yrs		25.5 yrs		27.3 yrs		26.8 yrs	
Mode	22.0 yrs (f=7)		18,21,22 yrs (f=5)		19.0 yrs (f=7)		19.0 yrs (f=7)		22.0 yrs (f=11)		22.0 yrs (f=9)	
Range	16-56 years		16 - 56 yrs		17-72 years		17 - 72 yrs		16-72 years		16 - 72 yrs	

TABLE 2.- (CONTD.)

	ABILITY INDUSTRIES				ABILITY PRESS				BOTH WORKSHOPS			
	REG.EMPLOYEES (n=85)		RESPONDENTS (n=74)		REG.EMPLOYEES (n=66)		RESPONDENTS (n=58)		REG.EMPLOYEES (n=151)		RESPONDENTS (n=132)	
	f	(%)	f	(%)	f	(%)	f	(%)	f	(%)	f	(%)
C. LENGTH OF EMPLOYMENT												
1 year or less	10	(11.8)	9	(12.2)	10	(15.2)	10	(17.2)	20	(13.2)	19	(14.4)
2-3 years	16	(18.8)	13	(17.6)	14	(21.2)	13	(22.4)	30	(19.9)	26	(19.7)
4-5 years	16	(18.8)	14	(18.9)	12	(18.2)	9	(15.5)	28	(18.5)	23	(17.4)
6-10 years	32	(37.6)	28	(37.8)	19	(28.8)	18	(31.0)	51	(33.8)	46	(34.8)
11-20 years	11	(12.9)	10	(13.5)	11	(16.7)	8	(13.8)	22	(14.6)	18	(13.6)
Mean	6.5 yrs		6.6 yrs		6.0 yrs		5.7. yrs		6.3 yrs		6.2 yrs	
Median	5.7 yrs		5.6 yrs		4.8 yrs		4.5 yrs		5.2 yrs		5.2 yrs	
Mode	4.0 yrs (f=12)		4.0 yrs (f=10)		3.4 yrs (f=8)		1.0 yr (f=10)		4.0 yrs (f=20)		1.0 yr (f=19)	
Range	<1-20 years		< 1 - 20 years		<1-19 years		<1-19 years		<1-20 years		<1-20 years	

About the Analysis

Three levels of data analysis were planned for variables of nominal to interval scale (some assumed ordinal-to-interval):

First, simple univariate distributions;

Second, cross-tabulations of no more than three variables;

Third, path analysis of the reported satisfaction levels, factor indicators, and employee descriptors.

Further analysis could demonstrate the construct validity of the satisfaction factors.

Part I of the report shows that only the first two levels of analysis were implemented with less work being done with cross-tabs than anticipated. Where significant differences are reported (or lack of significance), these were determined by the statistic appropriate to the variable measurement scale (e.g. Chi square, Tau). The third level of analysis was not completed as (1) there was insufficient response distribution on many key items and, (2) in a few cases, high non-response rates did not warrant more sophisticated statistical analysis. The data from the sample did not justify drawing more complex conclusions. Analysis remains a major unmet research need along with inclusion of more employee variables (e.g. degree of disability and job performance assessment).

Methodological Issues

Project staff recognized that ethical issues arise in research with human beings, and the value conflict faced in the need for information:

> 'They must choose between their obligation to conduct research and their obligation to protect the welfare of their research subjects' (Selltiz, Wrightsman and Cook 1976, p. 201).

The approach to the research design, data collection and reporting has attempted to avoid or minimize ethically questionable practices (Selltiz, Wrightsman and Cook 1976, pp. 200-249). The project will continue to maintain its responsibilities to the respondents in the future.

Consultation with the workshop representatives has been important for two reasons:

- For assessment of the value and human costs of the survey project from the viewpoint of the potential respondents.
- To initiate cooperation from individual participants.

Other aspects of the survey have helped to decrease potential sources of error inherent in research with 'socially distant respondents' (Myers 1979).

Continuing involvement of the interviewers during instrument design and data collection undoubtedly developed the 'shared systems of relevance' (Makas 1980, p. 27) within the highly reliable research team. Overall, respondent rights and level of understanding were primary controls on rigid methodology without sacrifice of scientific objectivity.

Question wording

This self-report survey faced multiple problems of reliability and validity found in any study of attitudes and particularly in measuring job satisfaction. General issues of question-wording were handled as follows:

> Information on job satisfaction was asked for in a global sense (one question) and as a set of questions which theoretically partialized the concept.

Any question of such nebulous content may mean different things to different people. This has been shown to be especially difficult in comparing attitudes between occupations (Robinson, Athanasiou & Head 1969).

There may not be 'job satisfaction' but satisfaction, or dissatisfaction, with varying aspects of the work (Blauner 1960, described in the section on conceptual framework).

Some attitudinal questions are more sensitive than factual questions to changes in wording, context, emphasis and so forth. Reliability therefore cannot be determined by asking the question in a different way as this could change the meaning. The alternative of sets of questions was considered more reliable as the underlying attitude would be common to all of the items. Any 'vagaries of question wording' should apply only to particular items and bias could cancel out (Oppenheim 1966, p. 73).

A respondent may not want to answer a question on satisfaction honestly, or may not be able to - reflecting a cultural bias toward contentment (Blauner 1960), or a feeling that his competency was being questioned. Conduct of this study by the agency sponsoring the workshops could increase this feeling of attack on one's work despite assurances to the contrary.

Multiple items of assumed correlates provide an opportunity to test internal consistency of responses, with following assumptions of validity.

The items were assumed to have construct validity.

The selection of the factors of job satisfaction and indicators (questions) was made from extensive research in the field, using professional judgment as to appropriateness for the special employment worker group and feasibility of data collection. The 'measure' of job satisfaction was based on prior judgment without empirical item analysis or tests for homogeneity.

Questions asked for the respondent's feelings about adaptation to the workshops and anticipation (i.e. future changes).

Where people adopt the policy of calling on their powers of adaptation (such as in being happy in a special employment setting), they become unreliable instruments for measuring the fitness of the environment, including the work environment. If job satisfaction data is 'given the imprimatur of scientific respectability', there is a risk of inaction or unsatisfactoriy changes (Spillane 1980, p. 43). Job satisfaction could then be justly labelled a conservative concept reflecting the "I can stand it" syndrome. The usual questions in employee attitude surveys are general, impersonal, and do not raise the need for specific action with the result of eliciting highly positive (conservative) responses - a mixture of resignation and accommodation.

Questions emphasizing the concept of anticipation generally elicit negative responses. This is supposedly the syndrome: 'But I don't want it to stay this way - I want to think the future can be better.' Inclusion of both types of questions should provide a wider range of knowledge about employee attitudes (Spillane 1980),

Except for comparison with general life satisfaction, reported job satisfaction was 'absolute'.

While job satisfaction is comparatively as stable as life satisfaction, it is probably incremental with capability for some alteration from day to day depending upon individual determinants. The report for the group, however, would take this into consideration as being, in effect, the 'mean level of satisfaction' at the point in time of data collection (or, each respondent's satisfaction at the day and time of interviewing).

No meaningful comparative bases were found for interpreting employee satisfaction findings. While the suggestion has been made that 'levels of satisfaction in absolute terms and in isolation from other data are meaningless' (Larsen et al 1979, p. 198), the rationale for the study and the basic lack of knowledge about the topic gives value to the findings. Later within workshop and between workshop comparisons, and study of changes over time will add to the value by establishing 'relative' levels of satisfaction.

In summary, no standard scale, instrument or methods were found applicable to measuring job satisfaction of sheltered workshop employees. The requirements that the assessment be simple, standardized and useful in its results lead project staff to devising indicators of job satisfaction that could be used with a minimum of communication problems (transmitting the ideas and receiving the attitudes without ambiguity).

Interview schedule

The interview schedule included a few controls to avoid the introduction of interviewer bias (A Summary of Studies 1977, p. 77): In response to a respondent's questions, the simple standardized introductory statement could be elaborated upon by the interviewer from more detailed information about the survey. Within the interview schedule, introductory statements were used as transition devices from one topic to another. (A copy of the schedule is shown as an Appendix.)

Nondirective probe questions were included in areas where nonspecific or ambiguous information was likely to be reported. This included the response categories for pre-coded items. Interviewers were free to modify their approach and find a way to help respondents understand a question or to encourage a response. As much deviation as possible was removed through the structure of the tested instrument. Familiarity with the questions and the techniques used for increasing reliability between interviewers also helped to standardize obtaining perceptions subjective to the respondents without leading or 'putting words in their mouths'.

"Filter" questions were used to exclude a respondent from a particular question sequence irrelevant to him, while the "funnel" approach (starting off with a broad question, then narrowing the scope to specific points) was used to elicit explanations or example of an opinion.

Where possible, interview questions avoided simple 'yes' or 'no' responses. In some cases it was decided to include the issue (question content) but sample it only in this broad fashion. Explanation of the response for some questions was obtained through following "filter" questions. Also, more structured response categories were desirable for the study population. Although not classified as mentally retarded, the communication and understanding problems of many employees could evoke similar acquiesence, or, a general tendency to answer affirmatively regardless of question content (Sigelman et al. 1980).

With regard to response categories for satisfaction attitude questions, it has been suggested that 'dichotomizing responses into only "satisfied" and "dissatisfied" categories has the effect overestimating the actual degree of satisfaction by pushing those who are in the middle category toward the satisfied alternative' (Blauner 1960, p. 355). The usual five-point response scale was considered too complex for these respondents and most indicators were thus phrased as a question having a three-point anchored answer. Some items with two-point answers had a 'yes' response qualified, allowing for an alternative choice to 'no'. In all cases, the midpoint was not planned as a neutral position but it may have received this interpretation.

The sequence of questions was of great concern. 'Each survey produces its own problems of question order' (Oppenheim 1966, p. 39). The aim was to avoid putting ideas into the respondent's mind, or suggesting desired or 'the right' opinions or responses. The length of time to be allowed for the interview did not permit as much of a lead of more open questions as was desirable, and more structured-response, precoded items had to be placed near the top of the list.

Factual questions - asking for the respondent's perception of the situation or of his experience or behaviour - generally preceded attitudinal questions concerning those points but time again limited the amount of self-reported behaviour that could be obtained. As discovered by other researchers, 'our final choice of approach and sequence must be determined by our own survey problems and by the results of the pilot work' (Oppenheim 1966, p. 40).

Criteria used for ordering the interview schedule were: A logical progression so that the respondent became involved in the interview by an interest provoking but non-controversial beginning item (i.e., 'What do you do at ...?'); questions asking for more complex answers placed later in the interview when the respondent was engaged in the process yet before informant fatigue set in; not too early introduction of questions about sensitive areas (e.g., about supervisor relationships); and logical, smooth movement from one area or frame of reference to another.

Project assessment

After data collection was completed, new research findings (Makas 1980) suggested that use of non-disabled interviewers may have been more valid than initially assumed. Rehabilitation clients in the United States were surveyed as to their attitudes toward counsellor characteristics. Age and sex were important predictors of counsellor preference. Disability characteristics were of moderate importance to a fourth of the sample or less. Other findings are not relevant to the present survey but these do give credence to the project's findings on the mixed panel of interviewers.

As an indicator of inter-interviewer reliability, respondents were grouped according to sequence of interview by each interviewer (first, second or third cluster for each interviewer without regard to date or time between). Analysis on five key variables with the widest response distribution found low levels of significance within and between interviewer groups. Except for possible signing problems mentioned earlier, the data collection process does seem to have been reliable. This analysis also showed that change in the sampling frame (from a 50 per cent sample to workshop population) did not affect the trends of the data, only quantitatively reinforcing the findings.

Replication of the project should consider means for overcoming methodological problems, beginning with alternatives to the restricted amount of data that can be obtained using only time-limited interviews containing simplified queries. This would require some change of question wording and addition of some items. Value gained from the changes would outweigh loss of direct comparison with findings from the present study.

REFERENCES

(Parts I and II)

A Conference for Sheltered Workshop Personnel and Rehabilitation Workers in Related Fields, Theme: Developing the work potential of the handicapped person (1975), Australian Council for Rehabilitation of Disabled.

(ACROD) Australian Council for Rehabilitation of Disabled (n.d.), 'Recommended standards for sheltered employment' (pamphlet).

(A.C.T.U.) Australian Council of Trade Unions (1980), 'Education Policy 1980'.

Argyle, M. (1972), The Social Psychology of Work, Penguin Books, Middlesex, England.

A Study to Develop a Model for Employment Services for the Handicapped (1969), Greenleigh Associates, Inc., New York.

A Summary of Studies of Interviewing Methodology (1977), DHEW Publication No. (HRS) 77-1343, U. S. Department of Health, Education, and Welfare, Public Health Service, U. S. Government Printing Office, Washington, D. C.

Bausell, R.B. and Rinkus, A.J. (1979), 'A comparison of written versus oral interviews', Evaluation & The Health Professions 2:4, 477-86.

Berscheid, E. and Walster, E. H. (1978), Interpersonal Attraction, 2nd ed., Addison-Wesley Publishing Company, Reading, Mass., cited by G. Berkson and D. Romer (1980), 'Social ecology of supervised communal facilities for mentally disabled adults: I. Introduction', Americal Journal of Mental Deficiency 5:3, 219-28.

Blauner, R. (1960), 'Work satisfaction and industrial trends in modern society', in Labor and Trade Unionism: An Interdisciplinary Reader, edited by W. Galenson and S. M. Lipset, John Wiley and Sons, New York.

('Bright Report'), The Law and Persons with Handicaps, Vol 1: Physical Handicaps (1978), Committee on Rights of Persons with Handicaps, Adelaide, S.A.

Brolin, D. E. (1980), 'Employment opportunities and job maintenance of severely disabled persons in Australia', Final report (World Rehabilitation Fund Grant #22-P-59032/2-02).

Brown, J. A. C. (1954), The Social Psychology of Industry, Penguin Books, Middlesex, England.

Burnett, S. E. and Yerxa, E. J. (1980), 'Community-based and college-based needs assessment of physically disabled persons', The American Journal of Occupational Therapy 34:3, 201-207.

Cannell, C. F., Oksenberg, L., and Converse, J. M., eds. (1979), Experiments in Interviewing Techniques: Field Experiements in Health Reporting, 1971-1977, Institute for Social Research, The University of Michigan, Ann Arbor.

Cannon, J. (1977), 'Sheltered employment - where to now?' Social Security Quarterly 5:1, 7-17.

Caplow, T. (1956), 'The dynamics of information interviewing', American Journal of Sociology, 62, 165-71.

Commonwealth Department of Productivity (1979), Safety and Health at Work: Summary of Legislation, Australian Government Publishing Service, Canberra.

Commonwealth Department of Social Security (1974), Design and Layout of Sheltered Workshops, Australian Government Publishing Service, Canberra.

Cropley, A. J. and UNESCO (1977), Lifelong Education: A Psychological Analysis, Pergamon Press, Oxford.

Design Rules for Access by the Disabled: Code of Practice for, AS1428-1977 (1977), Standards Association of Australia, North Sydney.

Dixon, J. K. 1977), 'Coping with prejudice: Attitudes of handicapped persons toward the handicapped', Journal of Chronic Disease 30, 307-22.

Duke, C. (1976), 'Lifelong education: An Australian prognosis', Occasional Papers in Continuing Education No. 13, Australian National University, Canberra.

Emery, F. E. and Phillips, C. (1976), Living at Work, Australian Government Publishing Service, Canberra.

Employee Participation: A Broad View (1979), National Employee Participation Steering Committee, Australian Government Publishing Service, Canberra.

Giles, D. H. (1977), Worker Participation in Australia: The Motives, Philosophy and Practice, The Australian Institute of Management (n.p.).

Gillespie, D. F. (1978), 'Themes from Work Organization Research applied to social service settings: A review essay', Journal of Social Service Research 2:2, 233-42.

Goldhaber, G. M. (1974), Organizational Communication, Wm. C. Brown Company, Publishers, Dubuque, Iowa.

Grover, D. (1979), 'Sheltered workshop programs', in Proceedings of the Tenth Medical and Educational Conference of The Australian Cerebral Palsy Association Incorporated, Glen Waverly, Victoria, 8th-11th November 1979.

Gunzburg, D. (1980), Employee Participation in Australia: Progress Report, Australian Government Publishing Service, Canberra.

Hall, D. (1977), 'Sheltered employment - A paradox', national rehabilitation digest 3/4, 18-20.

Hayes, A. T. (1977), Sheltered Employment in Australia, Civilian Maimed & Limbless Association, Sydney.

Hodgetts, F.R.G. (n.d.), Management in Sheltered Workshops, /Victorian Society for Crippled Children and Adults, South Melbourne/.

Holmes, S.L. (1979), 'What to expect from your first survey of employee morale', Personnel (American Management Association March-April), 69-73.

Household Survey Manual, 1969, Executive Office of the President, Bureau of the Budget, /Washington, D.C./

Hyman, H.H. and others (1975), Interviewing in Social Research, The University of Chicago Press, Chicago, Illinois.

Interviewer's Manual (1969), Survey Research Centre, Institute for Social Research, The University of Michigan, Ann Arbor.

Jenkins, K.I. (1969), 'The role of sheltered employment in workshops, rural schemes and home industry', Address to Australian Council for Rehabilitation of Disabled, May Conference, Sydney.

Lansbury, R.D. and Prideaux, G.J. (1978), Improving the Quality of Work Life, Longman Cheshire, Melbourne.

Lansbury, R.D., ed. (1980), Democracy in the Work Place, Longman Cheshire, Melbourne.

Larsen, D.L. and others (1979), 'Assessment of client/patient satisfaction: development of a general scale', Evaluation and Program Planning 2, 197-207.

Lengrand, P. (1975), An Introduction to Lifelong Education, new edition, Croom Helm, London & UNESCO Press, Paris.

Levitan, S.A. and Taggart R. (1977), Jobs for the Disabled, The John Hopkins University Press, Baltimore, Maryland.

Limbrick, D.N. (1977), 'Sheltered employment - basketweaving, paperfolding and cardboard cut-outs?', national rehabilitation digest No. 2, 13-19.

Locke, E.A. (1976), 'The nature and causes of job satisfaction', in Handbook of Industrial Organisational Psychology, edited by M.D. Dunnette, Rand McNally Publishing Company, New York.

Makas, I. (1980) 'Client attitudes toward counsellor characteristics',national rehabilitation digest 4:3, 26-27.

Maslow, A.H. (1970), Motivation and Personality, 2nd ed., Harper & Row, Publishers, New York.

Morano, R.A. (1979), 'Unlocking the secret of job satisfaction', Supervisory Management, (American Management Association, May), 17-20.

Moser, C.A. and Kalton, G. (1973), Survey Methods in Social Investigation, 2nd ed., Heinemann Educational Books, London.

Myers, V. (1979), 'Survey methods and socially distant respondents', Social Work Research & Abstracts 15:1, 3-9.

MacDonald, L. Kinkaide, P. and Braizer, B (1979), 'Job related factors contributing to job satisfaction among rehabilitation staff', Journal of Practical Approaches to Developmental Handicap 3:2, 23-26

National Conference on Sheltered Employment Services 1977, Theme: "Sheltered Employment - Where Now?", Australian Council for Rehabilitation of Disabled.

Neff, W.S. (1968), Work and Human Behaviour, Atherton Press, New York.

Norton, S.D:, Massengill, D. and Schneider, H.L. (1979). 'Is job enrichment success or a failure?' Human Resource Management, (Winter) 28-37.

O'Brien, G.F. and Dowling, P. (1980), 'The effects of congruency between perceived and desired job attributes upon job satisfaction', Journal of Occupational Psychology, Vol. 53, 121-130.

Ogren, E.H. (1978), 'Society Attitudes toward the handicapped adolescent and young adult', in Proceedings of National Convention, 78, Australian Council on Rehabilitation of Disabled.

Oppenheim, A.N. (1966), Questionnaire Design and Attitude Measurement, Basic Books, Inc., New York.

Pihlblad, C.T., Rosencranz, H.A., and McNevin, T.E. (1967), 'An examination of the effects of perceptual frames of reference in interviewing older respondents', Gerontologist 7:2 (Part I), 125-27.

Pomerantz, D.J. and Marholin, D. (1977), 'Vocational habilitation: a time for change, in Educational Programming for the Severely and Profoundly Handicapped, edited by I. Sontag, J. Smith, & N. Certo, Council for Exceptional Children, Reston, Virginia, reprinted, (1980) in Normalization, Social Integration, and Community Services, edited by R.J. Flynn and K.L. Nitsch, University Park Press, Baltimore, Maryland.

Rabinowitz S. and Hall, D.T. (1977) p.13 'Organisational research on job involvement Psychological Bulletin 84:2, 265-288.

Recurrent Education 1977: Trends, Tensions and Trade-offs (1978), Report of National Seminar or Recurrent Education, Canberra, edited by C. Duke, Australian Government Publishing Service, Canberra.

Robinson, J.P. and Shaver, P.R. (1973),Measures of Social Psychological Attitudes, revised, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan.

Robinson, J.P., Athanasiou, R. and Head, K.B. (1969), Measures of Occupational Attitudes and Occupational Characteristics, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan.

Roessler, R., and Bolton, B. (1978), Psychosocial Adjustment to Disability, University Park Press, Baltimore, Maryland.

Schlesinger, H. and Whelan, E. (1979), *Industry & Effort: A study of Work Centres in England, Wales and Northern Ireland for severely disabled adults*, The Spastics Society in association with William Heinemann Medical Books Ltd., London.

Selltiz, C., Wrightsman, L.S. and Cook, S.W. (1976), *Research Methods in Social Relations,* 3rd ed., Holt, Rinehart and Winston, New York.

Sheltered Workshop Study, Volume II: Study of Handicapped Clients in Sheltered Workshops and Recommendations of the Secretary (1979), U.S. Department of Labor, /Washington, D.C./.

Sigelman, C.K., et al. (1980), 'Surveying mentally retarded persons: Responsiveness and response validity in three samples', *American Journal of Mental Deficiency* 84:5, 479-86.

Spillane, R.M. (1980), 'Job satisfaction - Anticipation or resignation?", *Human Resource Management Australia* 18:1, 42-46.

Survey of Sheltered Employment 1976 (1977), Department of Social Security, Canberra.

The Role of the Sheltered Workshops in the Rehabilitation of the Severely Handicapped (1975), Greenleigh Associates, Inc., New York.

Treloar, S. (1977), *The Relationship between Poverty and Disability in Australia*, Australian Government Publishing Service, Canberra.

(U.S.GAO) United States General Accounting Office (1980), *Better Reevaluations of Handicapped Persons in Sheltered Workshops Could Increase Their Opportunities for Competitive Employment*, Report to the Secretary of Health, Education, and Welfare.

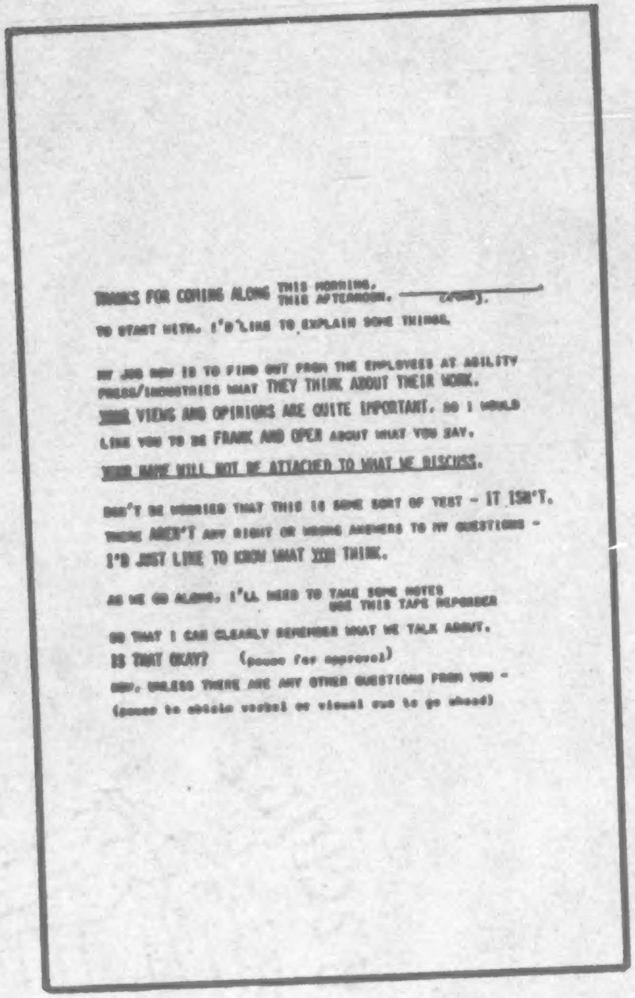
Vash, C.L. (1977), *Sheltered Industrial Employment*, Institute for Research Utilization, Washington, D.C.

Walker, K.F. (n.d.), 'Worker participation in management for Australia', *Work and People* 5:3 3-12

Weiss, C.H., Bauman, L.J. and Rogers, T.F. (1971), *Respondent/Interviewer Interaction in the Research Interview: Abstracts,* DHEW Publication No. (HSM) 72-3006 (NTIS No. 204-597), U.S. Department of Health, Education, and Welfare, Public Health Service, Rockville, Maryland.

Weiss, C.H. (1974), 'Research organizations interview the poor', *Social Problems* 22:2, 246-59.

APPENDIX


THANKS FOR COMING ALONG THIS MORNING, / THIS AFTERNOON, ________ (NAME).

TO START WITH, I'D LIKE TO EXPLAIN SOME THINGS.

MY JOB NOW IS TO FIND OUT FROM THE EMPLOYEES AT ABILITY PRESS/INDUSTRIES WHAT THEY THINK ABOUT THEIR WORK. YOUR VIEWS AND OPINIONS ARE QUITE IMPORTANT, SO I WOULD LIKE YOU TO BE FRANK AND OPEN ABOUT WHAT YOU SAY. YOUR NAME WILL NOT BE ATTACHED TO WHAT WE DISCUSS.

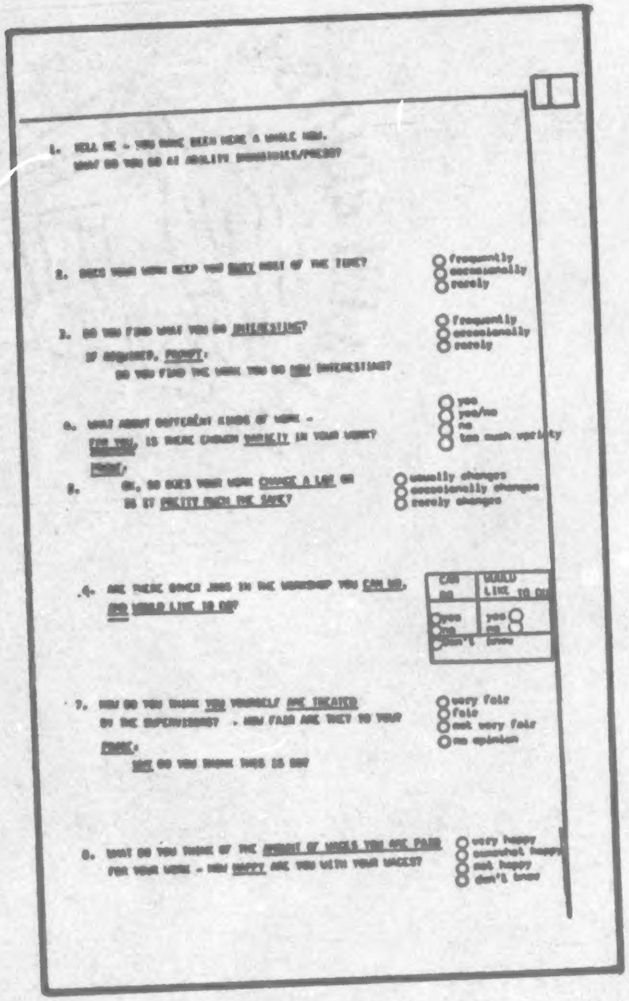
DON'T BE WORRIED THAT THIS IS SOME SORT OF TEST - IT ISN'T. THERE AREN'T ANY RIGHT OR WRONG ANSWERS TO MY QUESTIONS - I'D JUST LIKE TO KNOW WHAT YOU THINK.

AS WE GO ALONG, I'LL NEED TO TAKE SOME NOTES / USE THIS TAPE RECORDER SO THAT I CAN CLEARLY REMEMBER WHAT WE TALK ABOUT.

IS THAT OKAY? (pause for approval)

NOW, UNLESS THERE ARE ANY OTHER QUESTIONS FROM YOU -

(pause to obtain verbal or visual cue to go ahead)


1. TELL ME - YOU HAVE BEEN HERE A WHILE NOW. WHAT DO YOU DO AT ABILITY INDUSTRIES/PRESS?

2. DOES YOUR WORK KEEP YOU BUSY MOST OF THE TIME?
○ frequently
○ occasionally
○ rarely

3. DO YOU FIND WHAT YOU DO INTERESTING?
IF REQUIRED, PROMPT:
DO YOU FIND THE WORK YOU DO NOW INTERESTING?
○ frequently
○ occasionally
○ rarely

4. WHAT ABOUT DIFFERENT KINDS OF WORK -
FOR YOU, IS THERE ENOUGH VARIETY IN YOUR WORK?
○ yes
○ yes/no
○ no
○ too much variety

PROMPT:
5. OR, SO DOES YOUR WORK CHANGE A LOT OR IS IT PRETTY MUCH THE SAME?
○ usually changes
○ occasionally changes
○ rarely changes

6. ARE THERE OTHER JOBS IN THE WORKSHOP YOU CAN DO, AND WOULD LIKE TO DO?

CAN DO	WOULD LIKE TO
○ yes ○ no	yes ○ no ○
○ don't know	

7. HOW DO YOU THINK YOU YOURSELF ARE TREATED BY THE SUPERVISORS? - HOW FAIR ARE THEY TO YOU?
PROMPT:
WHY DO YOU THINK THIS IS SO?
○ very fair
○ fair
○ not very fair
○ no opinion

8. WHAT DO YOU THINK OF THE AMOUNT OF WAGES YOU ARE PAID FOR YOUR WORK - HOW HAPPY ARE YOU WITH YOUR WAGES?
○ very happy
○ somewhat happy
○ not happy
○ don't know

9. TO PUT IT ANOTHER WAY - FOR WHAT YOU DO HERE, DO YOU THINK YOU GET A FAIR WAGE?
○ yes
○ no
○ don't know

IF 'no', WHY NOT?

(IN THE EVENT OF AN EXTENDED ANSWER: Well, you've answered that question pretty clearly now - so we'll move on.)

10. HOW COMFORTABLE DO YOU FIND THE FACILITIES AND CONDITIONS HERE FOR WORK? ARE THEY OKAY?
○ okay
○ not alright
○ don't know

IF 'not alright', WHY NOT? WHAT IS WRONG?

11. WHAT ABOUT LUNCH AND OTHER BREAKS DURING THE DAY - ARE THE FACILITIES FOR COMFORTABLE?
○ okay
○ not alright
○ don't know

IF 'not alright': WHY NOT?

[illegible] I'D LIKE TO ASK FOR YOUR COMMENTS ABOUT PERSONAL ASSISTANCE THAT EMPLOYEES AT INDUSTRIES/PRESS MIGHT NEED:

12. DO YOU THINK THERE IS ENOUGH ASSISTANCE WITH TOILETING NEEDS?
○ yes
○ no
○ don't know

13. IS THERE ENOUGH NURSING AID (OR FIRST AID CARE) AVAILABLE?
○ yes
○ no
○ don't know

14. IS THERE SUFFICIENT ASSISTANCE FOR THOSE WHO NEED HELP WITH FEEDING?
○ yes
○ no
○ don't know

15. ENOUGH HELP PROVIDED TO THOSE WHO HAVE DIFFICULTY GETTING AROUND?
○ yes
○ no
○ don't know

16. ENOUGH HELP TO GET JOBS SET UP?
○ yes
○ no
○ don't know

17. HOW WELL DO THE EMPLOYEES AROUND YOU GET ON WITH EACH OTHER?
○ usually well
○ some problems
○ not very well
○ don't know

PROBE: WHY DO YOU THINK THIS HAPPENS?

18. DO YOU HELP EACH OTHER A LOT?

19. IF YOU HAVE A PROBLEM ABOUT WORK, WHO DO YOU NORMALLY GO TO FOR HELP?
○ NO PROBLEMS
○ manager
○ supervisor
○ social worker
○ other employee

PROBE: (IF NOT THE 'SUPERVISOR') DO YOU DISCUSS THINGS WITH YOUR SUPERVISOR?
○ yes
○ no

(IF 'NO') IS THERE ANY PARTICULAR REASON WHY NOT?

20. HOW IMPORTANT DO YOU THINK IT IS FOR EMPLOYEES TO HAVE A SAY IN THE RUNNING OF THE WORKSHOP?
○ very important
○ important
○ not important
○ no opinion

IF 'IMPORTANT':

ON WHAT ISSUES IN PARTICULAR?

IN ALL CASES ASK:

CAN YOU TELL ME WHY YOU SAY THAT?

21. OVERALL, HOW HAPPY ARE YOU AT ABILITY INDUSTRIES/PRESS?
○ very happy
○ somewhat happy
○ not happy
○ no opinion

22. GENERALLY, DO YOU FEEL SATISFIED ABOUT YOUR LIFE?
○ very satisfied
○ satisfied
○ not satisfied
○ no opinion

33. FOR YOU, WHAT IS THE MOST IMPORTANT THING ABOUT THE WORKSHOP?

○ having a place to go each day;
○ seeing and being with the other employees;
○ being able to do/produce something.

PROBE: possible responses if necessary.

34. ARE ANY OF YOUR FELLOW EMPLOYEES YOUR FRIENDS?
○ yes, a lot
○ yes, a few
○ no

35. HOW DO YOU THINK OTHER PEOPLE OUTSIDE FEEL ABOUT THE WORKSHOP AND THE WORK YOU DO?
○ don't know

PROBE: WHAT ABOUT YOUR FAMILY? YOUR FRIENDS?

36. HAVE YOU EVER WORKED IN ANOTHER WORKSHOP?
○ no
○ yes, Ability Industries
○ yes, Ability Press
○ yes ____________ (Specify)

37. IS THERE ANYTHING YOU WOULD RATHER DO THAN ATTEND THIS WORKSHOP?
○ no nothing
○ yes, get a job outside
○ yes, study further
○ yes, learn new skills
○ yes, move to another workshop
○ yes, ____________ (Specify)

PROBE: response categories if necessary

IF YES: CAN YOU TELL ME WHY?

WHY DON'T YOU DO IT?

IF 'job outside wanted':

HAVE YOU EVER WORKED OUTSIDE?
○ yes, before coming to workshop
○ yes, at sometime since coming to workshop
○ no

37. continued.

HAVE YOU TRIED TO GET WORK OUTSIDE WHILE YOU HAVE BEEN HERE?
○ yes, in past
○ yes, trying now
○ no

IF "Yes, in past":

DO YOU THINK YOUR TIME HERE HELPED YOU (GET A JOB OUTSIDE)?
○ yes
○ no
○ don't know

IF "Yes, trying now":

DO YOU THINK YOUR TIME HERE IN THE WORKSHOP IS GOING TO HELP YOU?
○ yes
○ no
○ don't know

IF "Yes, time helped":

CAN YOU TELL ME HOW?
○
○
○ don't know

IF "No, time not helped":

CAN YOU TELL ME WHY NOT?
○
○
○ don't know

38. IS THERE ANYTHING ABOUT ABILITY INDUSTRIES/PRESS YOU WOULD LIKE TO SEE CHANGED?
○ nothing
○ more opportunity to learn new skills
○ the working conditions (specify)______
○ people work with
○ don't know
○ ____________ (specify)

WELL - IF THERE'S NOTHING ELSE YOU CAN SUGGEST, OR CHANGES YOU'D LIKE TO SEE? (pause to be sure nothing more)

OPTIONAL QUESTION:

39. IN SUMMING UP THEN - WHAT ADVICE WOULD YOU OFFER A NEW EMPLOYEE AT ABILITY INDUSTRIES/PRESS?

THANKS AGAIN FOR YOUR TIME - AND ANSWERING MY QUESTIONS.

I'VE APPRECIATED YOU TALKING TO ME.